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THE EFFECTS OF GROUP DESENSITIZATION, GROUP FLOODING,
AND GROUP DISCUSSION TREATMENTS IN THE REDUCTION
OF PUBLIC-SPEAKING ANXIETY,

by

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B.A. (Honours), Sir George Williams University, 1972

A Thesis
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ABSTRACT

The purpose of this study was to determine the effectiveness of three group treatment procedures in the short-term reduction of public-speaking anxiety. Treatments included systematic desensitization (SD), flooding (FLD), and a discussion-placebo (D-P) control condition. Subjects were solicited through advertisements distributed around the university campus. Twenty-four volunteer subjects were selected to participate in the experiment, but five subjects were lost through attrition. Subjects were equally divided into three matched groups, with each group receiving a different treatment. Three 90 minute treatment sessions were provided. Pre as well as posttreatment assessments were conducted employing both self-report and behavioral measures. Results revealed that the SD group showed significant pre to posttreatment change across all self-report measures, whereas the FLD and D-P groups showed similar improvement on only one self-report measure. No group demonstrated significant improvement on the behavioral measures. Furthermore the groups failed to exhibit significant differential improvement on any given measure. The fact that this study encountered difficulties in the satisfactory administration of both the SD and FLD treatments makes these findings tentative. The needs for further experimentation in this area were indicated.

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CHAPTER I

INTRODUCTION

Problem and Purpose

The last decade or so has witnessed the emergence of "behavior therapy" techniques into a respectable position in the armamentarium of treatment methods in clinical psychology. In reaction to a disaffection with dynamic models of therapy whose effectiveness was questioned on empirical grounds, certain theorists and practitioners alike sought to establish a treatment orientation which was based on laboratory investigations and which would lend itself to empirical manipulation and analysis. It is to this experimental approach to clinical practice that the term "behavior therapy" refers.

"Systematic desensitization" (SD) and "flooding" (FLD) are two behavior therapy techniques which have been employed in the treatment of a variety of emotional symptoms in diverse populations. The vast majority of studies in this area have reported on therapy employed in the typical individual treatment setting. However, in recognition of the need to maximize therapist time and resources, certain researchers have administered SD and FLD treatment methods in a group setting. While the effectiveness of group SD procedures have been relatively well established, studies on group applications of FLD are all too few in number and are characterized by methodological deficiencies. Moreover, although treatment procedures which combine group SD with some form of counselling have been successfully employed to reduce

public-speaking anxiety in particular, applications in this area of unmodified group SD have as yet not been attempted. Finally, investigators have compared the relative effectiveness of SD and FLD procedures to determine whether one is superior to the other. However such comparative studies, whether related to individual or group treatment methods, have typically not been free of criticism and findings have tended to be equivocal.

In an experimental design where the inadequacies of past studies are eliminated, this study will apply SD and FLD treatment procedures in a group setting to reduce public-speaking anxiety. A discussion-placebo treatment condition will as well be included in an effort to control for general therapeutic factors not specific to either the SD or FLD methods. The therapeutic effectiveness of each condition will be evaluated and the groups will be compared with each other to determine their relative effectiveness.

The Empirical Background of Flooding Procedures

Animal researchers have long known that exposing an animal for extended durations without aversive stimulation to a learned fear-arousing stimulus is an efficient method of bringing about the removal of fear-motivated avoidance behavior. Specifically, Masserman (1943) trained cats to fear exposure to a food dish by repeatedly presenting the cat with electric footshock, a noxious air blast, or a combination of these stimuli, as it was eating. After a number of such presentations the cat refused to approach the dish even under

conditions of severe food deprivation. However feeding was restored when the animal was forced to remain next to the dish. Similarly; Solomon, Kamin, and Wynn (1953) applied traumatic electrical shock to dogs in the presence of a light signal. The dogs soon learned to avoid shock by moving from the "shock" compartment to a "safe" (no-shock) compartment within a predetermined interval following light onset. Once the shock was disconnected, the dogs persisted in performing the avoidance response to the light signal for hundreds of trials. The authors demonstrated, however, that this avoidance tendency could be eliminated when a physical barrier was employed to prevent avoidance during light stimulus presentation.

Such findings related to forced extended exposure to fear-arousing stimuli have since been corroborated by numerous independent investigators utilizing varying experimental designs (Baum, 1970). The term "flooding" is used in the animal literature to denote those methods which achieve the removal of fear-cum-avoidance behavior by means of the extended elicitation of a heightened fear reaction, in the absence of aversive stimulation, to learned fear-arousing stimuli. The effectiveness of the flooding procedure has typically been attributed to the mechanism of "extinction" -- the process wherein stimuli which had previously come to be associated with painful stimulation are now presented in the absence of painful consequences (Baum, 1970).

The flooding technique (FLD) as a method for the reduction or removal of fear has been extrapolated from the laboratory onto the area of clinical practice. Here, clients are instructed to imagine

themselves being in anxiety-provoking situations that are relevant to their particular presenting problem. The therapist typically presents the client with descriptions of various distressing and anxiety-arousing scenes. The client is instructed not to attempt to avoid or escape the evoked anxiety but rather to "live" the emotional upsurge as vividly and freely as possible. Treatment is completed either when the client reports subjectively-perceived relief of his symptomatology, when the therapist observes that originally disturbing stimuli no longer evoke the anxiety reaction, or when the client is able to pass an appropriate behavioral test of anxiety responsiveness. Treatment may be conducted in vivo rather than in imaginal form, but because of the nature of the technique this tends to be the exception rather than the rule.

The effectiveness of the FLD method with humans has generally been related either to the mechanism of extinction or to a "cathartic" or "abreactive" process (Bandura, 1969; Marks, 1972). Still others have proposed that FLD may operate through a reflexive inhibitory system which is physiologically-based, (Staub, 1968). Ostensibly, sufficiently high levels of arousal may activate homeostatic inhibitory mechanisms which depress the activity level of other (i.e., arousal) physiological systems. On a more cognitive level, it has further been reasoned that FLD may relieve anxiety because it exhorts the client to confront his worst fears and in so doing permits him to realize that the adverse consequences which he anticipates are in

reality absent (Bandura, 1969; Marks, 1972; Stäub, 1968).

Before reviewing the therapy literature on FLD it should be pointed out that currently some confusion exists over the definition and characterization of FLD procedures. This confusion is attributable to the fact that researchers in this area typically do not differentiate between the terms Flooding (FLD) and Implosion Therapy (IT) when describing their treatment procedures. IT (Stampfl, 1966; 1967) like FLD is a clinical treatment method employed to reduce anxiety by means of a deliberate effort to maximize emotional arousal. However, unlike FLD, the theory basic to IT maintains that anxiety acquisition in humans is due to dynamic conflicts involving avoided or repressed aspects of the personality. Thus the IT therapist is not content with simple anxiety evocation but desires, as well, to uncover the repressed conflicts underlying and giving impetus to the anxiety. To this end, the IT therapist embellishes his scene descriptions with terrifying and revolting elements derived from his knowledge or understanding of the dynamics of unconscious processes. In so doing, the most primitive fears, urges, and fantasies considered to be at the root of the client's hypothesized unconscious conflicts are said to be touched upon and eliminated by means of the extinction process.

IT then both in theory and practice differs considerably from FLD. However the fact that the FLD method lacks an authoritative source that would clearly delineate its theoretical underpinnings as well as its systematic clinical application, has perhaps dampened the

distinctiveness of the FLD procedure particularly when considered alongside the IT method. The resulting blending and cross-labelling of techniques is hardly conducive to replicable research and clarity of communication. Morganstern (1973) appears up to now to be the only one in print to clearly distinguish between the two. He specifically reserves the term "flooding" to denote only those procedures which evoke heightened anxiety, but eschew dynamic formulations and anxiety-arousing elaborations of stimulus scenes beyond the nature of the client's presenting symptoms.

Few investigations have been conducted on the therapeutic effectiveness of the FLD procedure. First discussed will be those studies which have administered FLD on an individual treatment basis.

Wolpin and Raines (1966) appear to be one of the first to attempt to empirically investigate the effectiveness of a FLD procedure. In the portion of the study relevant here, two female snake-phobics were presented with intensely fear-provoking cues in imagination. Exposure duration per scene ranged from 2 to 30 minutes, there being between four and five treatment sessions. Session lengths were not equated for the two subjects. On a posttreatment avoidance test both subjects were found to be able to touch a snake they originally could not approach during pretreatment assessment. The paucity of subjects, the absence of control procedures, and the procedural inconsistencies between subjects make these findings suggestive at best. Moreover the first 15 minutes of each session was devoted to discussion of any "concern" the subject felt a need to talk about. Such extra-treatment

consultation makes it all the more difficult to attribute outcome to the FLD procedure per se.

In a balanced cross-over design employing FLD and a second treatment procedure, Everaerd et. al. (1973) provide data on the effectiveness of the FLD treatment for subjects who received FLD as the first treatment and were evaluated prior to administration of the second treatment method. Here subjects were seven volunteers described as suffering from agoraphobia. Pre and posttreatment assessment involved both behavioral and self-report indices of fear. There were six 90 minute FLD treatment sessions with half of each session being devoted to the visualizing of intensely fearful scenes while the remaining half consisted of FLD in vivo. Duration of scene presentations varied from three to eight minutes. In vivo FLD consisted of having the subject walk unaccompanied through a predetermined route in the city. Results revealed that these FLD subjects showed significant improvement on all behavioral measures and on two of three self-report indices of anxiety. The absence of a control condition however detracts from unreserved acceptance of these findings.

The remaining investigations which have employed a FLD procedure, be it in an individual or group setting, will be reviewed in a later section concerned with studies comparing FLD and SD treatment methods.

The Empirical Background of Systematic Desensitization Procedures

The germinal experimental study leading to the development of the SD procedure was conducted by Wolpe (1952) whose name is most assoc-

lated with SD. In his study Wolpe fed 12 cats in a specific room on a number of occasions. He then repeatedly shocked the animals in the same room until mere exposure to the room elicited a variety of behavioral indicators of extreme fear, including the animal's complete refusal to eat in the room even after severe deprivation. Wolpe found that disconnecting the shock was ineffective in getting the animals to resume eating. However, he discovered that such eating was restored when the animals were first fed in rooms that increasingly approximated the training room. In addition, Wolpe discovered that the animals typically had to be able to eat in a room with little anxiety, if eating in a second room, which was slightly more similar to the training room, was not to be disrupted.

On the basis of such findings Wolpe extrapolated his technique to the treatment of anxiety in human subjects. Practical limitations forced him to present fear-arousing cues in imagination and to substitute relaxation for feeding. Such tailoring of the technique to suit human application apparently cost his treatment method nothing in its effectiveness, since he reported immense success in using this procedure - which was now called Systematic Desensitization - with his clients (Wolpe, 1958). Moreover these changes were consistent with his theory explaining SD effectiveness. The theory will be presented shortly.

Wolpe (1958) proposed that SD is characterized by the following crucial procedural elements:

- (1) establishment of a hierarchy of scenes or "items" which increasingly approximate the most anxiety-arousing situation for the subject;
- (2) training the subject in relaxation;
- (3) presentation of anxiety-provoking stimuli commencing with those scenes low in the hierarchy (i.e., scenes of relatively minimal anxiety-arousing potential), and progressively and sequentially ascending the hierarchy by presenting scenes of increasing anxiety-arousing potential;
- (4) withdrawing the anxiety-evoking stimulus whenever the subject reports feelings of excessive anxiety.

SD proper commences once relaxation and hierarchy construction have been completed, and consists of working through the hierarchy under conditions of maintained relaxation. The subject is first instructed to relax and is then asked to visualize the first scene in the hierarchy, that is, the stimulus deemed to be the least anxiety-provoking. The subject is instructed to signal to the therapist should his anxiety become intolerable, at which point he is instructed to stop visualizing the provoking scene and to concentrate instead on relaxing. After a short interval the subject is asked to visualize the same scene. Once visualization of the scene fails to evoke anxiety then that scene is determined to have lost its anxiety-arousing potential and the next scene in the hierarchy is now presented. Such pairing of relaxation and visualization is continued until the last

and most anxiety-arousing scene in the hierarchy is capable of being visualized without provoking anxiety. At this point treatment is terminated.

In explaining SD effectiveness Wolpe (1959) appears to adopt the following basic assumptions:

- (1) there exists a definable set of behaviors-such as eating, relaxation, sexual arousal, etc. (Wolpe & Lazarus, 1966) - which in terms of their physiological referents are incompatible with the simultaneous evocation of anxiety;
- (2) in any given context the simultaneous expression of an anxiety response and an incompatible response has the effect of one response inhibiting or suppressing the continued evocation of the other;
- (3) the response inhibited at any given point of simultaneous expression of responses will be that which has the lower "habit strength" or strength of response tendency relative to one another.

It follows then that the repeated evocation of anxiety in the presence of an incompatible response that is dominant in habit strength will result in the progressive diminution of the strength of the anxiety response. Given such reasoning, Wolpe (1958) maintains that the primary mechanism mediating SD outcome is that defined by the principle of "reciprocal inhibition". This principle states that, "If a response antagonistic to anxiety can be made to occur in the presence of anxiety-

evoking stimuli so that it is accompanied by a complete or partial suppression of the anxiety responses, the bond between these stimuli and the anxiety responses will be weakened" (p.71). Per theory, the requirement that the incompatible response be dominant over the anxiety response is achieved by hierarchical scene presentation wherein responses antagonistic to anxiety are purportedly always dominant.

The importance of instructing the subject to signal when anxiety becomes discomforting, and of then having the therapist temporarily cease scene presentation, naturally emanates from the theory. Mounting anxiety is taken as a sign that the dominance of the incompatible response is being threatened. To continue scene presentation under such circumstances would run the risk of having anxiety overwhelm the incompatible activity, thereby increasing anxiety while inhibiting its incompatible counterpart.

Whereas Wolpe asserts the importance of the principle of reciprocal inhibition in explaining SD success others (e.g. Yates, 1970) attribute SD effectiveness to a "counter-conditioning" process. In this view, units of the incompatible response are systematically substituted for units of the anxiety response having the final cumulative effect of making the former the more probable response tendency associated with the presented stimuli. Anxiety is here conceived to be neither gradually weakened nor eroded by the treatment process, but rather as being progressively supplanted by the opposing response. The anxiety is thus simply displaced and not eliminated or eradicated.

Even others (e.g. Wilkins, 1971) relate SD outcome to the collective influence of an array of social and cognitive factors including expectancy of therapeutic gain, therapist reinforcement of non-anxious behavior, the support, attention, and warmth inherent in the therapeutic relationship, demand characteristics, information feedback as to successful toleration of individual scenes and progression up the hierarchy, and finally, training in self-control in attention to anxiety-arousing stimuli.

The experimental literature purporting to demonstrate SD effectiveness in reducing anxiety is voluminous to say the least. Paul (1969) critically reviewed this abounding literature, and concluded that, although the vast majority of such investigations were methodologically deficient to varying degrees, nevertheless a handful of studies could be said to have satisfactorily demonstrated that SD is an effective and highly efficient therapeutic procedure.

Nonetheless, data is accumulating to the effect that (1) not only is Wolpe's assertion that eating and relaxation are physiologically incompatible with anxiety highly questionable empirically, but also, (2) his stricture that subjects must be able to avoid or escape anxiety during scene presentation may be an uneconomical appendage to the procedure (e.g. Lader & Mathews, 1968; Mathews, 1971; Miller & Nawas 1970). Having thus cast doubt on both theory and procedural detail numerous authors have turned their attention to the investigation of the necessity and relative contributions of relaxation and

graded exposure to SD outcome. Reviews of such investigations indicate that relaxation per se may be facilitative rather than a necessary component of SD, and that graded exposure in itself may reduce anxiety given that the majority of hierarchical items are successfully completed (Bapdura, 1969; Lang, 1969). However, the data suggest as well that the interactive application of relaxation and graded exposure is more effective than either relaxation or graded exposure alone. Wilson and Davison (1971) similarly concluded in their review of the pertinent animal literature that feeding and graded exposure in combination were more effective than either of these procedures given individually.

In sum, one must conclude with Lang (1969) that the "why's" and "how's" of positive change produced by SD are as yet unclear. What is clear however, according to Lang, is that "there is something about the desensitization process itself, the bald mechanics of the procedure, which instigates change" (p.189). This is all the more remarkable in that "consistent positive results are obtained despite wide variations in procedural details" (p.189). Thus the credibility of Wolpe's theoretical explanation of SD effects appears to be on the wane. It would appear as well that procedural flexibility is perhaps not as constricted as Wolpe had originally indicated.

With regard to group methods, Lazarus (1961) appears to be the first to have applied SD in groups. In this study all subjects were volunteers and included 11 acrophobics, 15 claustrophobics, 5 impotent men (suffering from sexual phobia), and a mixed group of 4 other phobic

patients. Group SD was administered to a total of 18 patients, while 9 patients received interpretive therapy (traditional psychotherapy), and 8 received a combination of SD and interpretive therapy. The mixed group received SD only whereas the other phobic patients were distributed among the three treatment conditions. Treatment was administered in separate, homogeneous groups, comprised of three to four members. SD subjects were exposed to a common hierarchy with the rate and duration of individual scene presentations being determined by the progress of the slowest, that is, the most anxious, group member. SD was terminated when all subjects could visualize the most severely arousing scene for at least 10 seconds without anxiety. The remaining treatment groups were disbanded after having received the same number of treatment sessions as the corresponding SD group. Therapy effects for acrophobics were assessed by means of a situational test, whereas effects for claustrophobics were assessed by means of both a situational test and subjective reports of improvement. The impotent men and the mixed group were assessed solely by means of self-reports of behavior change.

The author reported that phobic behavior was completely eliminated in 13 of 18 SD subjects, whereas only 2 of 17 of the interpretive and interpretive plus SD subjects showed similar improvement. Follow-up inquiries after an average of nine months revealed that 10 of the 13 SD subjects continued to show improvement in spite of extremely stringent criteria of therapeutic change. Unfortunately, however, the study

lacked a control condition, groups were conducted at different intervals, there was no indication that session durations were equated between treatment conditions, and the number of sessions varied from group to group within conditions. Furthermore the use of divergent assessment criteria for different types of subjects does not permit equal generalization of results for all subjects. Finally, the absolute dichotomized criterion of unimproved versus improved does not allow sufficient leeway for the adequate assessment of therapeutic change.

Rachman (1965) has reported the successful use of a group SD procedure in reducing spider-phobia in female college students. Here, 12 subjects were first given a behavioral avoidance test and a self-report scale as pretreatment assessments of fear intensity. Subjects were then equally divided into four matched groups each group being randomly assigned to one of the following four conditions: group SD, graded exposure, relaxation training, or a no-treatment control procedure. Subjects in either of the first three treatment conditions received a total of 10 treatment sessions. No-treatment control subjects merely participated in all assessment procedures. A comparison of pre and posttreatment assessment scores revealed that significantly greater positive change was shown by group SD subjects than by members of any other treatment condition. At a three month follow-up employing similar measures, neither relapse nor symptom-substitution was evidenced among SD subjects. Unfortunately the lack of adequate subjects per cell makes these findings only suggestive.

Robinson and Suinn (1969) administered group SD to 11 female student volunteers who had been assessed by means of a behavioral test and self-report scales as being moderately to intensely afraid of spiders. A composite hierarchy was employed, there being five one-hour treatment sessions in toto. Posttreatment assessment scores indicated that the subjects had shown significant improvement on both the behavioral and subjective measures. A major criticism of this study however is that it lacked a control group.

Numerous studies have employed a group SD procedure in order to reduce test-anxiety in college students. In one such study, Donner and Guernsey (1969) assigned 42 test-anxious female volunteers to either a SD condition with a therapist present, a SD condition where treatment was administered by means of automated tape, or to a waiting-list control condition. The SD procedures were "pre-programmed" in that item presentation rate and duration were predetermined by the experimenter rather than being geared to the pace of group members. There were eight treatment sessions, each approximately 50 minutes in duration. Results revealed that neither of the three conditions had produced improvement on a self-report measure which was administered at pre and posttreatment and following final school examinations. However, on an objective criterion measure, grade point average (G.P.A.), both SD groups showed significant improvement in G.P.A. scores obtained in the semester immediately following treatment as compared to scores obtained prior to treatment. Control group members

on the other hand failed to exhibit any improvement on the G.P.A. measure. After a five month follow-up (Donner, 1970), SD subjects were found not only to have maintained their initial G.P.A. improvement but also to have shown even further improvement.

Garlington and Cotler (1969), Ihli and Garlington (1969), and Kondas (1967) have reported positive findings with a group SD procedure on self-report measures of test-anxiety. In the only study of the above to have employed an objective criterion measure, Garlington and Cotler failed to find improvement in the G.P.A.. Moreover, Lomont and Sherman (1971) reported that for both SD and control group members significant improvement in test-anxiety was not obtained. In this latter study, test-anxiety was assessed by means of a questionnaire, course test grades, and in terms of performance on a laboratory behavioral test. It is not entirely clear as to why there is such inconsistency of findings in this area.

Paul and Shannon (1966) and Melchenbaum et. al. (1971) have both successfully employed a combined group SD and counselling treatment procedure to reduce public-speaking anxiety. Unfortunately the combination of SD with a second treatment procedure does not permit the attribution of outcome solely to one procedure or the other. However the impressive feature of these studies is that posttreatment improvement was consistently obtained on both subjective and objective indices of anxiety..

More specifically, in the Paul and Shannon study 20 college

students were equally divided between a group SD and an attention-placebo condition. The participants in the SD condition were students who had been placed in a waiting-list control condition in an earlier study but who had shown no improvement during the waiting interval. Both groups were equated on scores obtained on a battery of self-report measures of both general anxiety and anxiety specifically related to public-speaking. This self-report battery was re-administered immediately after the completion of treatment. In addition, G.P.A. scores for the semester prior to and following treatment were obtained. Treatment was conducted in small groups of five members each, there being nine treatment sessions each of approximately 60 minutes duration. A common hierarchy was employed with treatment being geared to the pace of the most anxious member. Among other things, intensive group discussion of the target problem took place in a number of sessions and it is such adjunct therapeutic elements that collectively may be said to have constituted the "counselling" aspect of treatment. The SD subjects were found to have significantly improved in their G.P.A. scores and to have shown significantly greater improvement than control subjects on self-report measures of speech anxiety and on certain measures of general anxiety. The control subjects showed a deteriorated performance in their mean G.P.A.. These findings were found to have persisted after a two year follow-up (Paul, 1968). When compared to earlier individual treatments (Paul, 1966), the group SD procedure was observed to be at least as effective as the individual SD procedure across all measures,

and in fact was slightly superior in G.P.A. improvement.

In the Meichenbaum et. al. (1971) study, that is, of that portion relevant here, subjects were assigned to either a waiting list control condition, a discussion-placebo control condition, or to a group SD procedure similar to that employed by Paul and Shannon (1966). Measures of anxiety included self-report ratings and the presentation of a speech in front of a small, live audience, with the audience members rating the subject on a behavioral checklist of speech anxiety. In addition, the subject's speech characteristics during speech presentation were monitored to provide added objective measures of speech anxiety. Assessments of anxiety level were conducted both prior to and following treatment. There were eight treatment sessions, each approximately 60 minutes in duration. Results revealed that, on all measures, the SD subjects showed significantly greater beneficial change than did the control subjects. A three month follow-up employing only the self-report measures indicated that the SD subjects had maintained their decreased level of subjectively perceived anxiety.

Comparative Studies of Flooding and Systematic Desensitization

All too few relevant investigations have been conducted comparing FLD with SD in terms of treatment effectiveness. Moreover, those investigations that are available have been characterized by a highly disproportionate amount of methodological error. Such error includes absence of control conditions (e.g., Boulgouris et. al., 1971; Brock,

1967; Strahley, 1965), procedural inconsistencies between and/or within treatment conditions (e.g., Boulgouris et. al., 1971; Strahley, 1965), or deficiencies in design, measures, and statistical analyses (Brock, 1967; Calef & MacLean, 1970). In addition, these studies have reported generally inconsistent and contradictory findings thereby permitting no inference as to the superiority of one treatment procedure over the other. A similar conclusion abides for studies which have compared SD with the "implosion" procedure (Morganstern, 1973).

Unfortunately the issue of the superiority of one technique over the other seems no more settled by data obtained from studies which appear to be free of many of the shortcomings of the aforementioned studies. In De Moor's investigation (1970), for example, twenty-seven snake-phobic student volunteers were equally divided into three matched groups. One group received five sessions of the FLD treatment while another group received an equal number of treatment sessions but with SD. The remaining group served as a no-treatment control condition, and were merely evaluated at the same time as were members of the SD and FLD groups. FLD subjects received twenty minutes of non-stop scene presentation per session. SD subjects, on the other hand, received relaxation training for the first ten minutes of each session with the remaining ten minutes being reserved for SD proper.

A comparison of pre and posttreatment scores obtained on both behavioral and subjective indices of fear indicated that the SD and FLD groups showed significant improvement on all measures but that

they failed to differ from each other. The control group showed no significant improvement on either the behavioral or subjective measures. De Moor reported however that after a six-month follow-up three of the nine FLD subjects had relapsed whereas no relapse was discovered among the SD group. Lest it be inferred from the follow-up results that SD is more effective than (or superior to) FLD, the careful observer will take heed in that it was not reported what degree of change defined a relapse, nor on what measures, if any, such relapse was found to have obtained.

Whereas De Moor had applied treatment in the typical individual setting, Graff et. al. (1971) compared a "reciprocal inhibition" treatment, which is analogous to SD, with a "reactive inhibition" treatment, which is analogous to FLD, in a group treatment design. In this study, subjects were 84 volunteer students described, on the basis of scores obtained on two self-report scales, as having high degrees of anxiety related to a variety of school matters but primarily with regard to test-taking. These subjects were equally divided into the following four conditions:

- (1) "reciprocal inhibition" - a SD procedure wherein a standardized hierarchy was employed for all subjects. Session length varied from 45 to 60 minutes.
- (2) "reactive inhibition" - a FLD procedure where subjects were given a short script to read which urged the individual to think and dwell upon his anxiety and to experience the

anxiety deliberately and as fully as possible. Session length varied from 15 to 25 minutes.

- (3) "discussion-placebo" - members of this group participated in discussion of topics different from their school related anxieties and any other topic of emotional significance. Session length was approximately 45 minutes.
- (4) "waiting-list control" - subjects here received no treatment and merely participated in all assessment procedures.

The groups did not differ in their mean pretreatment assessment scores. There were 11 treatment sessions after which the posttreatment assessment was conducted.

The results revealed that both inhibition groups showed significant improvement, whereas the remaining two groups showed no appreciable change from pre to post scores. Importantly, the inhibition groups failed to differ from each other. These results were found to have remained unchanged after an eight week follow-up. However the failure to equate therapy time across conditions, and the use of self-report scales as the sole criterion measure detracts from uncritical acceptance of such findings. Interestingly, the FLD procedure in this study produced equivalent results to the SD procedure, although the former received less than half the therapy time afforded the latter. Furthermore, and in contrast to De Moor's findings, FLD members showed no relapse upon follow-up. The results of this study then suggest that FLD may be superior to SD in that the former requires less therapy

time than the latter to produce comparable results. Of course superiority here refers to greater "efficiency" and not "effectiveness".

Finally, Rachman (1966) treated three spider-phobic subjects with a group FLD procedure and compared them with three matched subjects who had been assigned to a no-treatment control condition. The FLD group received two minutes of continuous cue presentation, there being an average of 10 such presentations per session and 10 treatment sessions. Post-treatment assessment revealed no significant improvement on a behavioral avoidance test or on a self-report scale for either FLD or control group members. However, having only three subjects per cell falls far short of methodological requirements in outcome studies. Rachman also compared the results obtained with the FLD procedure with results obtained for three matched subjects who had undergone group SD treatment, with equivalent therapy exposure, in a previous study (Rachman 1965). The comparison revealed that the group SD subjects showed significantly greater improvement as compared to the FLD subjects. This finding was then interpreted as providing data to the effect that group SD is superior in its effectiveness to group FLD.

Staub (1968) has criticized Rachman's FLD procedure on the grounds that two minutes of non-stop scene presentation may be too short a time, in that removal of the fear-arousing stimulus occurs at a time when the fear state is still intense and therefore has the counter-productive effect of strengthening the avoidance-escape tendency. However, such criticism may be unwarranted in view of the fact that there exists no

empirical study (with humans) as to the minimal continuous exposure time required to produce fear-reduction in a FLD treatment. Nevertheless, positive outcome may be associated with relatively longer durations of individual scene presentation. Wolpin and Raines (1966) employed an average of 10 minutes per scene presentation, Everaerd et. al. (1973) employed a minimum of 45 minutes, De Moor (1970) employed 20 minutes per scene, and Graff et. al. (1971) employed a minimum of 15 minutes of non-stop stimulus exposure. All of these studies reported successful reduction of the target anxieties. Moreover, animal studies on FLD have found greater facilitation in extinction of the avoidance response with longer durations of evoked fear (Baum, 1969; Katzev, 1967).

Ironically a criticism of the Rachman (1966) study that appears to this author to bear the greatest weight has typically been bypassed by other reviewers. Rachman reported that one of the three FLD subjects admitted an inability to visualize and experience emotion on a great majority of scene presentations, and a "switching-off" of emotional experience aroused by the remaining scenes. Such deliberate attenuation and escape from discomforting arousal was reported to have been typical of a second FLD member's treatment behavior. In light of these observations it is not entirely surprising that the FLD group showed no improvement on the posttreatment assessment. In all integrity then, an inference from Rachman's study to the effect that group SD is more effective than group FLD can only be considered as speculation.

Re-iteration of Problem and Purpose

A review of the pertinent literature thus indicates that group SD and group FLD treatment applications may reduce anxiety as assessed by both self-report and behavioral measures. However the comparative effectiveness of the two procedures has as yet not been firmly established. Furthermore, in the area of speech anxiety a group FLD application has as yet not been attempted while group SD applications have been contaminated by various "adjunct" therapy procedures thereby precluding a proper evaluation of the degree to which the SD procedure per se contributed to treatment outcome.

The present study then will apply group SD and group FLD treatments, in a controlled design, to reduce speech anxiety and will provide new data as to their comparative effectiveness. The group SD application will be devoid of any adjunct therapy procedures and as such will permit the relating of treatment effects to the SD procedure itself.

Hypotheses

On the basis of available evidence the following hypotheses are advanced:

- (1) that both SD and FLD treatments will produce a significant improvement in anxiety:
- (2) that both SD and FLD treatments will show significantly greater improvement when compared with a control procedure involving group discussion of affectively neutral topics.

This study will compare the effectiveness of the SD and FLD treatment procedures with one another, however the author feels that extant data do not justify the making of a prediction here favoring either treatment method.

CHAPTER II

METHOD

Subjects

Twenty-four volunteer Ss (18 males, 6 females) ranging in age from 17 to 35 years were selected to participate in this study. These Ss had responded to an advertisement circulated throughout the university describing a therapy program designed to eliminate "public-speaking anxiety". The only restrictions imposed for eligibility to participate were that S not be concurrently undergoing either psychological or psychiatric treatment for a mental health problem, and further, that he not be simultaneously enrolled in a public-speaking course.

The large majority (N=22) of Ss were university students (18 undergraduate, 4 graduate). However, two nonstudents (a social worker and a research chemist) participated as well. The 24 Ss were selected from a total of 51 interested persons who made inquiry regarding the program. Of this total, 11 prospective Ss failed to keep their interview appointments, and 3 had to be turned away due to inability to find a mutually convenient appointment time. Of the 37 candidates who were interviewed, 8 elected not to participate, and 5 who had made a commitment to participate at the time of the interview later cancelled their commitment prior to commencement of the experiment proper.

Behavioral and self-report measures of anxiety were obtained both

before and after treatment. As part of the assessment procedure, Ss were required to present a four-minute test speech while under the impression that they were being viewed by an audience through a one-way mirror. Following the pretreatment assessment, Ss were equally divided into three independent treatment groups which were matched on (a) mean scores obtained on several of the anxiety measures employed in the study (i.e., the PRCS, STAI-T, STAI-S, AAC, and SAI-S scales),¹ (b) the assigned speech topic presented during the pretreatment assessment, (c) the mean number of days Ss had available to prepare the test speech, and (d) the approximate sex distribution of the groups. Following three treatment sessions, each approximately 90 minutes in duration, a posttreatment assessment was conducted, which, in effect, repeated the pretreatment measures.

Measures of Anxiety

Self-report as well as behavioral indices of anxiety were employed as dependent measures, and were obtained both at pre and posttreatment stages of the experiment.

One behavioral measure involved evaluating Ss observed anxiety as he presented his test speech in the pre and posttreatment situations. The instrument employed here was a modified version of Paul's (1966) timed behavioral checklist for performance anxiety. The modified instrument, hereafter referred to as the MBHC, listed 20 observable

¹These instruments are described in the following section.

Indicators of anxiety, each of which was rated by judges on a 5-point scale immediately following completion of a speech (see Appendix C).

Additional behavioral indices included tape recording S's speech, and tabulating such speech characteristics as number of "ah" statements and duration of silences. Measurement of silence duration was achieved by first starting a stop-watch, calibrated to one-tenth of a second, in unison with speech commencement. This watch was stopped when the 4 minutes allotted for the speech had expired.² If at any time during this speech interval S was found to have said no word for a full second, then a second stop-watch, which was similarly calibrated to one-tenth of a second but was cumulative, was started. This second watch was stopped as soon as S had recommenced to speak. Each such pause of at least one second duration restarted the second watch which again was stopped immediately upon S's breaking silence by saying a word. The accumulated time showing on the second watch when the time of the speech had elapsed was the time taken for S with regard to his duration of silence. The number of "ah" statements was scored by simply recording the number of such utterances within the interval of time consumed by the speech.

²Although each test speech was to last 4 minutes, a considerable number of Ss failed to meet this criterion as they terminated their speeches at varying time intervals before the 4 minute limit had been reached. This occurred on both the pre and posttreatment speeches. As a result the first stop-watch was stopped when S terminated his speech, irregardless of whether or not the 4-minute requirement had been fulfilled.

The self-report measures of anxiety that were employed included the following:

- (1) State-Trait Anxiety Inventory (STAI) (Spielberger et. al., 1970).

The STAI is comprised of two separate scales each measuring a particular anxiety concept. One scale, the A-Trait, hereafter referred to as the STAI-T, yields a measure of how anxious a person feels generally. "Trait" anxiety thus refers to non-specific anxiety that is a chronic part of the personality and is relatively immutable across situations and time. The second scale, the A-State, hereafter referred to as the STAI-S, yields a measure of how anxious a person feels at a particular moment in time. "State" anxiety thus refers to anxiety that is transient and sensitive to momentary stress (see Appendices D1 and D2).

- (2) Speech Anxiety Inventory (SAI) (Lamb, 1972). The SAI is constructed on the same conceptual basis as the STAI, and differs essentially only in that the items here are specific to speech situations. In the present study only the Speech A-State form was employed, hereafter referred to as the SAI-S. This scale provides a measure of state as opposed to trait anxiety (see Appendix E).

- (3) Affect Adjective Checklist (AAC) (Zuckerman, 1960). The AAC provides another measure of subjectively perceived anxiety under short-term stress conditions. This instrument lists 61 affectively toned adjectives, with S being required to check those adjectives which reflect his feelings at the time during which his judgments

are made (see Appendix F).

(4) Personal Report of Confidence as a Speaker (PRCS) (Paul, 1966).

The PRCS provides a measure of S's feelings of confidence as a speaker.

This instrument is composed of true-false statements regarding S's perceived anxiety with respect to his most recent speech presentation (see Appendix G).

Procedure

Those prospective Ss who responded to the advertisement were required to make an appointment for an initial interview. During this interview, the nature and procedures of the therapy program were briefly and very generally outlined and the candidate was apprised of the commitment involved in participation (e.g., time, test speeches, etc.).³

Following this, S was asked to sign a "release" form which stated that he was at that time not undergoing treatment for any mental health problem and that he was cognizant that alternate treatment would be made available to him upon request, if at the termination of the program he was not satisfied with the treatment received. (However, no

³With specific reference to the test speeches, Ss were told that they would be required to present a 4-minute speech, at both pre and post-treatment assessment stages, in front of a one-way mirror which hid an audience in the adjoining room. The audience was described as being comprised of fellow students who were to view the S and to evaluate his performance. Ss were told that they would be permitted to consult reference notes when making their speech; however, they were sternly cautioned against reading from their reference material.

S ever made such a request.) Next, the PRCS and STAI-T scales were completed by S after which he was informed of the topic of his first test speech. S was told that he should make every effort to prepare his own speech, but that if he found it too difficult to do so, then a speech prepared by E would be made available to him prior to his presentation.

There were two speech topics available. Speech "A" was entitled, "What I expect to get out of college", and speech "B" was entitled, "What I see myself or would like to see myself doing 10 years from now". These topics were selected as they were felt to refer to relatively non-anxiety arousing content areas and to be topically relevant to participation in the study. The first S accepted to participate in the program was assigned speech "A", the second S, speech "B", the third S, speech "A", and so on. In this way, an equal number of Ss received each of the two topics, with the average number of days available to prepare speeches on either topic being approximately equal.

The interview was terminated by requesting S to construct a hierarchy of situations felt to be differentially anxiety arousing for him based on past, present, or anticipated speech experiences. This request was made so as to provide thematic material for scene presentations in the SD and FLD treatment conditions. However, most Ss found this task too difficult, and were able to list only a few situations or experiences, the vast majority of which were left un-

ranked.

On the day of the pretreatment test speech, S first completed the STAI-S and AAC scales. Following this, S was conducted to the speech room where he was met by two individuals, who aside from S were to be the only ones in the room. Of these two individuals one was an assistant who, insofar as S was informed, had the duties of controlling the tape recorder and of telling S when the 4-minute time limit had been reached. The second individual was truthfully introduced as a T.V. media technician who would stand at one end of the mirror facing S, and was charged with the task of filming S's presentation. S stood next to a microphone which was stationed approximately 10 feet away from the mirror. Immediately following the speech S was led from the room to complete the SAI-S inventory.

When speaking, S was under the impression that there was an audience behind the mirror, viewing and evaluating him. However, in reality there was no such audience. Rather, and unknown to S, the assistant in the room was the one who evaluated him by means of the MBHC instrument once S had completed his speech and had left the speech room.

Two male assistants of advanced standing in psychology were employed to serve as raters or observers. Each assistant rated approximately half the Ss on each assessment occasion, with Ss rated by a given assistant on the final test speech being those whom he had not rated on the pretreatment test speech. The assistants were

trained to use the MBHC Instrument by means of role play techniques and discussions related to arriving at agreed upon concrete and quantitative definitions of the behavior to be rated. Additionally, the assistants rated and discussed their evaluations of two "dummy" speeches presented by persons who had no further involvement whatsoever in the study. (Inter-rater reliabilities comparing the individual item scores were calculated for both the first and second "dummy" speeches and were found to be .58 and .81 respectively.) Upon completion of the postassessment phase, each assistant observed and rated the films of the speeches he had not rated previously. Thus in the end each assistant rated each S on both test speeches.

Subsequent to the pretreatment assessment Ss were assigned to one of three treatment groups (SD, FLD, or a Discussion-Placebo control group), subject to the constraints outlined previously regarding the matching of groups. Ss received a total of three 90 minute group treatment sessions which were conducted at weekly intervals. The pretreatment assessment preceded the first treatment session by one week, and the posttreatment phase was conducted approximately one week following the final treatment session.

Three separate treatment conditions were employed in the study and are described below. The author served as the sole therapist for all three groups. Treatment sessions for all groups, were conducted in one and the same room, which was different from that employed for assessment purposes. Finally, the introductory statement that each group

received, introduced the relevant treatment in a manner carefully designed to institute common expectancies among Ss with regard to treatment outcome.

(a) Group Systematic Desensitization (SD)

This treatment method followed the general procedures outlined by Wolpe (1958). To provide an atmosphere amenable to relaxation during treatment, room lights were dimmed, Ss were asked to recline on bean bags, and all possible precautions were taken to eliminate disruption by external noise. The first session commenced with a prepared statement explaining the rationale and procedures of the treatment (5 minutes). This statement was distributed to Ss in the form of a handout (see Appendix H). Following this, relaxation training was conducted and occupied the remainder of the session (85 minutes) (see Appendix L). The second session commenced with added practice in relaxation (20 minutes), which was followed by practice in the visualization of neutral stimuli (15 minutes) (see Appendix K). This in turn was succeeded by treatment proper which consumed the remainder of the session (55 minutes). The third and final session commenced with a brief relaxation induction period (15 minutes), which was followed by treatment proper (75 minutes).

Treatment proper here consisted of the presentation of anxiety-arousing items from a standardized "anxiety hierarchy" while Ss attempted to maintain relaxation (see Appendix M). The hierarchy

consisted of 21 scenes pertaining to a public-speaking situation arranged in order from least to most anxiety-arousing. It was of the "spatial-temporal" variety in that it consisted of a graded hierarchy of events falling along a stimulus generalization gradient of distance outward in time and space from the most anxiety-arousing speech performance. Movement up the hierarchy from one scene to the next was contingent on all Ss first being able to visualize the previous scene for five consecutive 20-second periods without anxiety. Rate and duration of individual scene presentation were governed by the pace of the most anxious member. This was accomplished by instructing Ss to signal immediately, by raising a hand, if they experienced uncomfortable anxiety. Once S had so signalled, the entire group was instructed to stop visualizing and to concentrate instead on relaxing. After a 10 second interval, the group was instructed to visualize this last scene once again. Scenes for which Ss had signalled were re-visualized in this manner until the criterion for advancement up the hierarchy had been met.⁴ The second session was terminated with a scene which had been successfully mastered, and it was this same scene that was presented during the third session. At the termination of treatment all items of the hierarchy had been presented.

So as to aid S in clearly visualizing the stimulus scenes as well

⁴Despite the procedure described here, no S ever took advantage of the opportunity to signal. Consequently, in the experiment proper this procedure was in fact never evoked.

as to minimize any disinclination S may have with regard to signalling in front of a group (due to embarrassment, inferred group pressure, etc.), deliberate insistence was made with regard to Ss keeping their eyes closed throughout the treatment sessions. As well, Ss were prohibited from talking during the sessions and were asked to provide, after each session, written feedback regarding their treatment experience, including any critical comments concerning the procedures employed. Finally, Ss were requested to practice relaxation at home for approximately 15 minutes per day. To help them in this, each S was provided with a copy of the manual of instructions for relaxation training.

(b) Group Flooding (FLD)

So as to minimize any tendency toward relaxation during treatment Ss were requested to sit on wooden chairs, with the room lights fully open. The first session of this treatment condition commenced with a handout containing an introductory statement explaining the rationale and procedures of the treatment (5 minutes) (see Appendix I). Following this, practice in the visualization of neutral stimuli took place (15 minutes) (see Appendix K) which in turn was followed by treatment proper for the remainder of the session (70 minutes). All subsequent sessions were devoted in entirety to the treatment proper (90 minutes).

Here, treatment proper consisted of having Ss visualize, non-

stop, intensely anxiety-arousing scenes which had been created by the therapist (and presented (i.e., read) to Ss in the form of a dramatic story-script. In most vivid and elaborate fashion, each script described scenes from a continuing storyline involving a terrifying and deprecating experience in a public-speaking situation. (see Appendices N, O, and P). A different script was employed for each session. Whereas the scripts for the first and second sessions were designed so as to provide enough time to be reread, the script employed in the third session was designed to be read but once. This alteration was deemed desirable in view of feedback received from the group to the effect that rereading of the scripts led to feelings of monotony and boredom, and as such were experienced as being ineffectual in arousing and maintaining peak levels of anxiety.

As with the SD group, Ss were instructed to keep their eyes closed throughout each treatment session not only to help them better image the stimulus scenes but also in an effort to minimize any inhibitions S may have had with regard to displaying anxious behavior before his peers. Ss here were similarly prohibited from talking during the sessions, and feedback in written form was again requested at the conclusion of each session.

(c) 'Group Discussion-Placebo (D-P)

The D-P control treatment condition was similar to that employed by Meichenbaum et. al. (1971) in their study. It was included to

assess outcome effects attributable to such non-specific treatment factors as expectancy of improvement, suggestion, and any positive feelings related to group involvement. The first session commenced with an introductory statement explaining the rationale and procedures of the treatment (5 minutes) (see Appendix J). Following this, treatment proper was initiated (85 minutes). The remaining two sessions were devoted exclusively to the treatment proper (90 minutes).

Treatment proper here consisted of presenting the group with a series of tasks (one task per session), each of which posed a problem requiring group resolution by means of discussion and consensus (see Appendix Q). Discussion took place in a relatively non-anxiety arousing atmosphere, such that if and when discussion of an ostensibly emotionally-laden issue arose it was quickly redirected and discouraged by the therapist. Treatment was presented to the group as being analogous to a continuing mini-workshop aimed at increasing one's interpersonal communication skills. It was emphasized that the focus of treatment was to encourage speaking in a relatively calm, objective and non-evaluative social atmosphere, and that such practice should then facilitate speaking in diverse interpersonal contexts in a similar anxiety-free manner. As with the other groups feedback in written form was requested at the end of each session.

In the postassessment phase which was conducted, as stated previously, approximately one week after each group had concluded its' final therapy session, the preassessment measures were repeated with

but slight procedural modifications. Firstly, whereas measures in the preassessment phase were obtained over two days, that is, the interview day and the day of the first test speech, all measures in the postassessment phase were obtained in a single day, that is, the day of the final test speech. Secondly, the sequence of test administration in the postassessment phase changed from the order PRCS, STAI-T, STAI-S, AAC, and SAI-S as in the preassessment phase, to the order STAI-S, AAC, SAI-S, PRCS, and STAI-T⁵. This latter change in sequence of test administration was in accord with the nature of the two instruments involved.

⁵Thus in the postassessment phase the PRCS and STAI-T inventories were administered following completion of the final test speech.

CHAPTER III

RESULTS

At irregular intervals during the course of the study, five Ss failed to return for therapy. While this attrition reduced the FLD and D-P groups to 7 and 4 Ss respectively, the SD group remained fully intact. Inspection of pretreatment scores on each test measure for the lost Ss revealed that they did not differ significantly from the Ss who remained for the complete duration of the study.

In view of the fact that speech times varied both within and between Ss for the pre and posttreatment test speeches, scores on the "ah" and silence duration measures were calculated as ratios of number of "ahs" or length of silences to Ss's total length of speech. Such ratios were found to yield extremely low fractions, and as a result it further became necessary to multiply each ratio score by 1000 in order to make the data more manageable for statistical treatment.

Unfortunately, statistically non-significant correlations were found for the MBHC ratings made by the two observers. As will be recalled, live ratings were made by each observer for different halves of the total Ss on both the pre and posttreatment speeches with each observer rating the alternate half for the second speech. The observer later rated the speeches for which he was not present by means of videotape. Thus the computation of inter-rater reliabilities, for each speech, involved matching "live" versus "tape" ratings. Pearson

product-moment correlation coefficients of scores across observers for the pre and posttreatment speeches were found to be $-.35$ ($N=24$) and $-.14$ ($N=19$) respectively, neither of which even approached statistical significance. In effect then, there appears to have been a total lack of reliability of ratings between observers, when judgements were made under different modes of observation. It was consequently decided that, rather than discard this measure, the live ratings of each observer would be retained in favor of the tape ratings, and would be subjected to statistical treatment along with the other dependent measures. Thus for the MBHC measure, pre as opposed to posttreatment scores for any given S represent live ratings made by different observers. Two-tailed t-tests comparing the mean ratings of the two observers on both the pre and posttreatment speeches ascertained that their ratings were not significantly different on either test occasion.

The reliability of scores on the "ah" and silence duration measures were also determined for both speeches. Reliabilities were obtained by having the same judge repeat his tabulations derived from the audio tapes approximately one week after having made his initial tabulations. Correlation coefficients of pretreatment scores on the "ah" and silence duration measures were $.99$ and $.95$ respectively ($N=24$). Corresponding reliabilities for posttreatment scores were $.99$ and $.96$ ($N=19$).

For all subsequent analyses data are reported for only those Ss who completed all aspects of the study, that is, for 19 of the original

24 Ss, the remaining 5 Ss having been lost through attrition as previously stated. (An analysis of the pretreatment test scores obtained by these 5 Ss revealed no differences in mean scores when compared to the remaining 19 Ss.)

Appendix A reports the raw data. For any given measure, scores are positively related to anxiety. Appendix B2 shows the distribution of Ss on each dependent measure into High, Moderate, and Low anxiety classifications based on their pretreatment scores. Such distribution revealed that on at least six of the eight measures the majority of Ss fell into the High and/or Moderate anxiety ranges. This confirms then that the Ss employed in the study were indeed anxious.

Table 1 presents the means and standard deviations of the pre and posttreatment scores obtained by the three treatment groups on each dependent measure. Simple analyses of variance performed on the pretreatment scores for each measure revealed nonsignificant differences between treatment groups. These analyses serve to verify the efforts of E in equating the groups on their pretreatment test scores.

Each dependent measure was next subjected to a 3 x 2 (Treatment Groups X Pre v.s. Post Treatment) unweighted-means analysis of variance (ANOVA) with repeated measures on the last factor (Winer, 1971). Tables 2 and 3 summarize the results of these analyses. As can be observed from these tables, significant effects appear only for the Pre v.s. Post Treatment factor, and this on only four of the

eight dependent measures. In each case where a significant difference was found a decrease of anxiety scores for the treatment groups may be observed in Table 1. No significant intergroup differences or interaction effects were found however. The complete absence of significant findings for the interaction effect reveals that for each measure the groups failed to show evidence of differential improvements as a function of their respective treatments.

In consideration of the fact that planned comparisons had been either built into or been implicit in the design of the study, further statistical analyses were undertaken to test these specific comparisons (Winer, 1971). Hypothesis 1 predicted that the SD and FLD groups would each show significant pre to posttreatment change. While no explicit prediction was made as to Pre-Post differences for the D-P group, nevertheless such a comparison was implicit in the study. With regard to these within-group Pre v.s. Post comparisons, simple effects analyses were carried out, for each measure, based on the original ANOVA's. The results of these analyses are presented in Table 4. These analyses reveal that none of the three groups showed significant pre to post change on any of the behavioral measures. However for the self-report measures improvements were found for the SD group across all such measures, whereas the FLD and D-P groups each manifested improvement on only one measure, the SAI-S. It would thus appear, on the basis of such further analyses, that Hypothesis 1 was partially confirmed. The prediction of significant improvements for the SD

TABLE 1
Pre and Post Treatment Means and Standard Deviations
of the SD, FLD, and D-P Treatment Groups
on the Anxiety Measures Employed
in this Study

Treatment	Measures																
	Self-Report								Behavioral								
	PRCS	STAI-T ^d	STAI-S ^d	AAC	SAI-S ^d	MBHC	"AH" ratio	SILENCES ratio									
Groups	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post					
SD ^a	\bar{x}	21.13	16.13	57.50	52.00	65.38	59.75	14.00	10.00	66.88	51.63	20.75	15.63	80.65	62.40	37.40	20.60
	sd	6.19	6.81	8.65	11.09	5.85	6.77	3.20	2.82	7.84	3.46	4.68	4.26	92.47	63.75	41.47	20.21
FLD ^b	\bar{x}	20.57	17.00	55.43	51.14	67.86	67.00	13.57	13.29	64.29	53.29	20.43	15.29	80.44	117.25	30.09	8.81
	sd	4.99	6.95	12.95	7.68	8.13	4.47	3.97	2.87	9.86	8.07	7.99	7.61	88.22	122.36	34.31	10.34
D-P ^c	\bar{x}	18.50	17.50	54.25	56.75	68.00	66.00	13.25	12.25	68.50	57.25	17.75	13.00	99.76	54.95	26.59	3.03
	sd	4.79	8.18	26.37	13.54	4.96	2.44	4.20	1.50	8.26	8.61	6.50	4.16	69.57	46.46	36.19	5.23

^aN=8.^bN=7.^cN=4.^dData reported are converted T-scores.

Analyses of Variance of Treatment Group and Pre v.s. Post Treatment Scores
on Individual Self-Report Measures of Anxiety
Employed in this Study

TABLE 2

Source of Variation	df	Measures									
		PRCS		STAI-T		STAI-S		AAC		SAI-S	
		MS	F	MS	F	MS	F	MS	F	MS	F
<u>Between Subjects</u>	<u>18</u>										
A (Groups)	2	2.03	0.03	14.71	0.07	84.02	1.83	5.91	0.56	57.90	0.71
Subjects w. groups	16	67.10		212.37		45.87		10.62		81.89	
<u>Within Subjects</u>	<u>19</u>										
B (Pre v.s. Post)	1	88.41	6.15*	51.30	2.68	69.60	2.55	26.87	2.86	1357.00	35.76**
AB	2	11.87	0.83	53.79	2.81	17.95	0.66	11.29	1.12	16.42	0.43
B X subj. w. groups	16	14.37		19.14		27.27		9.41		37.95	

* $P < .05$.** $P < .01$.

TABLE 3
Analyses of Variance of Treatment Groups and Pre v.s. Post Treatment Scores
on Individual Behavioral Measures of Anxiety
Employed in this Study.

Source of Variation	df	Measures					
		MBHC		"AH" ratio		Silence Ratio	
		MS	F	MS	F	MS	F
<u>Between Subjects</u>	<u>18</u>						
A (Groups)	2	27.42	0.60	2,397.44	0.18	606.18	0.62
Subjects w. groups	16	45.50		13,332.07		985.70	
<u>Within Subjects</u>	<u>19</u>						
B (Pre v.s. Post)	1	217.41	7.58*	664.98	0.33	3,666.46	5.45*
AB	2	0.12	0.00	5,017.44	2.47	34.25	0.05
B X subj. w. groups	16	28.70		2,035.41		673.41	

* $P < .05$.

group received some confirmation in that improvements were found for the self-report but not the behavioral indices. Essentially disconfirmed, however, were the predicted significant improvements for the FLD group for which only one of the eight dependent measures showed a significant change. Finally, the typical lack of significant improvements for the D-P group appear to validate the control characteristic of the D-P treatment procedure.

Hypothesis II predicted that both the SD and FLD groups would show significantly greater improvements than would the D-P group. A comparison of improvement between the SD and FLD groups was also planned, but no predictions were made here. To test for these differential improvements between groups, t-tests were performed comparing group Pre-Post difference scores on each measure for all intergroup comparison combinations (i.e., SD v.s. FLD, SD v.s. D-P, and FLD v.s. D-P). Whereas the interaction effect on the ANOVA may be considered to have adequately tested for such differential improvements, nevertheless, the t-tests performed provide a more direct alternative test, albeit one of a statistically less conservative nature. None of these t-tests was found to yield statistical significance. Thus the t-test results are in full keeping with the lack of significant findings observed for the interaction effects on the ANOVA's. In effect then, no statistical confirmation whatsoever was found in this study for Hypothesis II.

TABLE 4
Simple Effects Analyses
Testing for Pre v.s. Post (Within-Group) Treatment Differences
for Each Treatment Group^a

Treatment Group	df	Measures							
		Self-Report					Behavioral		
		PRCS	STAI-T	STAI-S	AAC	SAI-S	MBHC	"AH" ratio	Silence ratio
SD	1, 16	6.96*	6.32*	4.64*	6.79*	24.51**	3.66	0.65	1.68
FLD	1, 16	3.11	3.36	0.09	0.03	11.16**	3.23	-2.33	2.35
D-P	1, 16	0.14	-0.65	0.29	0.21	6.67*	1.57	1.97	1.65

* $p < .05$.

** $p < .01$.

^aFigures below represent F ratios.

CHAPTER IV

DISCUSSION

The purpose of this study was to investigate the effectiveness of SD, FLD, and D-P treatment procedures in the time-limited short-term treatment of public-speaking anxiety. Specifically, two hypotheses were advanced in this regard. Hypothesis I predicted that significant improvements would be found for the SD and FLD treatment groups. Hypothesis II predicted that both SD and FLD groups would demonstrate significantly greater improvements than would the D-P group. No prediction was entertained as to differential improvements between the SD and FLD groups - this comparison being considered to be but exploratory in nature.

The results indicate that Hypothesis I was partially borne out for the SD group, while receiving little or no confirmation for the FLD group. There was no confirmation at all of Hypothesis II.

Implications Regarding Hypothesis I: Self-Report Measures

The improvements exhibited by the SD group on the entire battery of self-report measures reveal that group SD is an effective treatment procedure in reducing both acute and chronic speech anxiety (as indicated by the SAI-S and PRCS measures respectively) and further that such reduction of speech anxiety is associated with significant reduction of both acute and chronic general anxiety (as indicated by the STAI-S, AAC, and STAI-T measures, respectively). Thus the present

results increase our conviction as to the mellorative value of employing a group SD procedure in the treatment of subjectively perceived anxiety.

Importantly, however, feedback received from the SD group members revealed that, whereas they had learned to relax exceedingly well, they nevertheless experienced difficulties in clearly visualizing the stimulus scenes, particularly those higher up in the hierarchy. Given that members were provided with ample pretreatment practice in visualization, one can only conclude that this difficulty was related to resistance on their part against visualizing scenes which may have been experienced as too threatening. If this be so, then one wonders why there was a complete lack of signalling by the group members. Perhaps the standardized hierarchy items were not as potent anxiety-inducers as they were assumed to be. What is clear, however, is that the feedback indicates that the SD treatment delivery was not without blemish, and as such the present findings may well be underestimates of true group SD treatment effectiveness.

Improvements by the FLD and D-P groups on the SAI-S measure suggest that these groups experienced speech anxiety relief after having completed the final test speech. The singular nature of such anxiety reduction, however, as indicated by non-significant improvements on any other self-report index, makes this a finding of questionable significance. It may be worthy of note that the SAI inventory is still in its infancy of development with the present study, insofar as this

author is aware, being the first to employ it in a clinical research design. Perhaps the findings reported here for the SAI-S suggest a need for further validation of this instrument. On the other hand, these findings may also point to the need for studies such as the present one to guard against employing single self-report measures as opposed to a battery of related measures. Indeed, given the recently developed "state" - "trait" distinction of anxiety for general as well as speech-specific anxiety (Lamb 1972; Spielberger et. al.), it would appear that the concerned researcher in this area must employ a battery comprised of such distinct anxiety measures if he is to adequately evaluate the self-perceived effects of treatment exposure.

For the D-P group, the findings as a whole (including the high attrition rate) appear to validate the use of a D-P treatment condition as a control procedure. However, the similar lack of significant improvements found for the FLD group is not at all consistent with what was expected. Although the failure of the FLD group to show improvement suggests that group FLD procedures are ineffective in reducing subjectively perceived anxiety, it would be unfortunate if this inference were accepted without reservation. As with the SD group, FLD group members indicated via feedback that they had experienced difficulties in complying with treatment instructions. Specifically, they reported having difficulties in experiencing maximal anxiety and in the vivid visualizing of various anxiety scenes. These difficulties did not appear to be confined to any single treatment session (i.e.,

related to a particular script). In this context then, the ineffectiveness of the FLD treatment appears not to be surprising.

Again, as with the SD group, given that the FLD group received adequate pretreatment training in visualization of stimulus scenes, one may assume here too that the FLD group members were resisting treatment requirements and thereby experienced the difficulties noted above. In this instance, "resistance" would specifically refer to a defensive posture that any anxiety-troubled individual may be expected to adopt when confronted with FLD treatment. Concretely, it may be surmised that given the individual's awareness of the extreme stressfulness of the FLD technique, he would approach treatment with increased apprehension and initially increase his defensive tendency to resist the requisite upsurge of uninhibited anxiety. As therapy progresses, however, such defensiveness would be expected to gradually diminish with treatment being correspondingly facilitated. Where FLD treatment ignores the individual, as in any group FLD application including the one in the present study, increased treatment time may be necessary if the individual's presumed heightened defensiveness is to be overcome. Certainly, the three 90 minute treatment sessions provided here were inadequate in making a significant dent in the individual's defensive armour. Future research may well consider employing treatment time as an independent variable, and attempt to specify the functional relationship that exists between treatment time and type of FLD treatment administered (i.e., individual v.s. group).

Additionally, to allow the therapist to more adequately monitor the responsiveness of the individual group member in a group treatment setting, it may be desirable that such group treatment be structured around the progress of the slowest group member. This could be accomplished by incorporating a signalling method, similar to that used in SD procedures, whereby the individual would have the opportunity to indicate whenever he had difficulty experiencing anxiety for any stimulus scene.

Implications Regarding Hypothesis 1: Behavioral Measures

The lack of significant improvements found on the behavioral indices for the FLD and D-P groups is entirely consistent with the results observed for these groups on the self-report indices. However the similar lack of significant behavioral improvements demonstrated by the SD group stands in striking contrast to the improvements found for this group on the self-report measures. Whereas several theories of neurotic anxiety predict a transfer of effects from the subjective to the behavioral realm (e.g., Ellis, 1962; Rescorla and Solomon, 1967; Wolpe, 1961; 1963), nevertheless, a discrepancy of findings between self-report, behavioral, and even physiological indices of anxiety is by no means uncommon in the literature. As such the present discrepant findings observed for the SD group cannot be dismissed as an isolated and therefore (clinically) insignificant occurrence. Perhaps it is time for theorists and practitioners alike to recognize that therapeutic

tic intervention must, on occasion, encompass a variety of dimensions and not be directed to a single dimension in isolation.

The important question for this study, however, is what does subjectively experienced anxiety reduction in the absence of significant behavioral change imply in terms of lasting therapeutic effects? More concretely, would the SD group here, at an appropriate follow-up interval, continue to demonstrate this discrepancy, show positive behavioral transfer, or would the self-report improvements disappear? These questions serve to point out the importance of gathering long-term follow-up data, a procedure which unfortunately could not be carried out in the present study.

Implications Regarding Hypothesis II

While the current findings indicate that Hypothesis II was disconfirmed, taking this study as providing a definitive test of this hypothesis would be most injudicious. Given the previously mentioned difficulties encountered by FLD group members, the lack of significantly greater improvement for this group when compared with the D-P group is neither surprising nor really meaningful. However the lack of significant differences between the SD and D-P groups needs further clarification. One may assume that had the present findings not been possible underestimates of SD effectiveness, then the predicted differentiation of SD and D-P groups would well have been observed. In light of the difficulties the present study encountered in satisfactorily

administering the SD and FLD treatments, the results obtained here then can only be considered to provide an inadequate test of Hypothesis II.

The present study had also hoped to compare the relative effectiveness of the SD and FLD treatments. Considering the difficulties mentioned above regarding the fulfillment of treatment requirements for both SD and FLD techniques, the findings here, as well, cannot be said to meaningfully test this comparison.

In sum, further research is needed before one can make a definitive statement regarding the nature and characteristics of differential treatment effects in the reduction of public-speaking anxiety by means of SD, FLD, and D-P group treatment procedures.

Final Comment

As a final comment, this author cannot stress enough the need for clinical investigators to direct their research efforts to the question of the effectiveness of behavior therapy procedures in dealing with socially significant problems, such as public-speaking anxiety. In full accord with Paul's position (1969), public-speaking anxiety must be considered to be "a central life problem", most especially insofar as students are concerned. Given that studies on anxiety reduction typically employ a student population it would appear that public-speaking anxiety would be a considerably more important and practically more relevant area of treatment focus than

the small animal phobias which have received a disproportionate amount of investigative interest to the extent that until very recently, they have characterized the fear literature. This same point of view would equally encourage future research to consider test anxiety as a target problem when employing a student population.

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APPENDICES

APPENDIX A
RAW DATA

Group	S#	MEASURES																	
		Self-Report						Behavioral											
		PRCS	STAI-T ^a	STAI-S ^a	AAC	SAI-S ^a	MBHC	"AH" ^b ratio	SILENCES ^c ratio										
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post								
SD	1	9	10	50	45	57	60	10	8	66	46	22	15	17.24	0.00	13.79	0.00		
	2	23	15	46	33	66	61	13	9	59	53	30	14	86.49	82.93	22.16	34.63		
	3	22	21	59	61	60	58	11	11	69	49	21	15	0.00	0.00	86.25	48.35		
	4	26	21	54	43	70	60	16	12	75	55	19	14	246.15	120.00	104.62	13.33		
	5	30	27	74	67	72	66	18	14	60	54	21	21	8.33	0.00	0.00	0.00		
	6	18	8	54	52	62	46	15	9	56	56	19	13	18.18	32.05	0.00	0.00		
	7	22	18	60	59	73	69	11	12	75	51	13	10	193.55	166.67	8.39	44.14		
	8	19	9	63	56	63	58	18	5	75	49	21	23	75.27	97.56	63.98	24.39		
FLD	1	28	15	63	53	65	66	11	12	68	59	17	19	45.00	274.26	3.00	26.58		
	2	13	5	43	44	57	66	9	10	48	42	23	14	21.55	4.17	0.00	0.00		
	3	24	25	50	47	79	68	14	12	69	58	37	24	149.04	204.17	77.40	12.50		
	4	18	16	47	45	75	59	18	15	53	49	20	16	68.75	86.04	13.13	0.00		
	5	17	22	45	46	63	66	13	12	67	66	18	6	248.78	254.17	75.12	17.08		
	6	23	23	79	63	62	73	10	19	75	49	13	23	25.81	4.17	3.23	0.00		
	7	21	13	61	60	74	71	20	13	70	50	15	5	4.17	13.76	38.75	5.59		
	1	25	29	63	69	65	63	14	11	75	68	24	14	33.71	0.00	7.87	0.00		
D-P	2	19	10	61	52	63	66	9	11	57	47	9	18	187.50	95.24	17.19	1.30		
	3	14	17	34	43	74	66	13	14	68	58	21	8	55.56	32.89	80.00	0.00		
	4	16	14	59	63	70	69	17	13	74	56	17	12	122.27	91.67	1.31	10.83		
AT-Score values		bFREQ. "AH"s		cTotal Length of silences															
				x 1000		x 1000													
				Speech Length		Speech Length													

$\frac{aT\text{-Score values}}{\text{Speech Length}} \times 1000$ $\frac{b\text{Freq. "AH"s}}{\text{Speech Length}} \times 1000$ $\frac{c\text{Total Length of silences}}{\text{Speech Length}} \times 1000$

APPENDIX B1
Criteria for Classification as to Level
of Anxiety for Each
Dependent Measure

Anxiety Level	Measures							
	Self-Report				Behavioral			
	PROS ^a	STAI-T ^b	STAI-S ^b	AAC ^d	SAI-S ^c	MBHC ^d	"AH" ^d ratio	Silences ^d ratio
High	≥ 17	≥ 75%ile	≥ 75%ile	≥ 14	≥ 75%ile	≥ 25	1 per 10 secs	25% speech time
Moderate	14-16	50-74%ile	50-74%ile	11-13	50-74%ile	17-24	1 per 20 secs	11-24% speech time
Low	0-13	0-49%ile	0-49%ile	0-10	0-49%ile	0-16	Below	0-10% speech time

^aFrom Paul, 1966.

^bFrom normative data provided by Spielberger et. al., 1970.

^cFrom normative data provided by Lamb, 1973.

^dArbitrary criteria.

APPENDIX B2

Distribution of Subjects (According to Group) As to
Level of Anxiety Based on Pretreatment Test
Scores Obtained on Each Dependent Measure

Treatment Group	Anxiety Level	Measures								
		Self-Report					Behavioral			
		PRCS	STAI-T	STAI-S	AAC	SAI-S	MBHC	"AH" ratio	Silences ratio	
SD ^a	Hi. Mod. Lo.	7 - 1	4 2 2	7 1 -	4 3 1	6 2 -	1 6 1	2 2 4	- - 8	
	Hi. Mod. Lo.	6 - 1	4 - 3	7 - -	3 2 2	5 2 -	1 4 2	2 1 4	- - 7	
	Hi. Mod. Lo.	2 2 -	3 - 1	4 - -	2 1 1	4 - -	- 3 1	1 2 1	- - 4	
D-PC										

3N=8. bN=7. CN=4.

^aN=8. ^bN=7. ^cN=4.

APPENDIX C
THE MODIFIED BEHAVIORAL CHECKLIST
RATING FORM

Rater's Name.....

Speaker's Name.....

Date.....

RATING KEY

0 ————— 1 ————— 2 ————— 3 ————— 4

0=NEVER 2=MODERATELY 4=QUITE OFTEN

RATING

BEHAVIOR OBSERVED

- | | |
|-------|---|
| _____ | 1. Paces |
| _____ | 2. Sways |
| _____ | 3. Shuffles Feet |
| _____ | 4. Knees Tremble |
| _____ | 5. Extraneous Arm and Hand Movement (swings, scratches, toys, etc.) |
| _____ | 6. Arms Rigid |
| _____ | 7. Hands Restrained (in pockets, behind back, clasped) |
| _____ | 8. Hand Tremors |
| _____ | 9. No Eye Contact |
| _____ | 10. Face Muscles Tense (drawn, tics, grimaces) |
| _____ | 11. Face "Deadpan" |
| _____ | 12. Face Pale |
| _____ | 13. Face Flushed (blushes) |
| _____ | 14. Moistens Lips |
| _____ | 15. Swallows |
| _____ | 16. Clears Throat |
| _____ | 17. Breathes Heavily |
| _____ | 18. Perspires (face, hands, armpits) |
| _____ | 19. Voice Quivers |
| _____ | 20. Speech Blocks or Stammers |

SELF-EVALUATION QUESTIONNAIRE

Developed by C. D. Spielberger, R. L. Gorsuch and R. Lushene

STAI FORM X-1

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *feel* right now, that is, at *this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

- | | NOT AT ALL | SOMEWHAT | MODERATELY SO | VERY MUCH SO |
|--|------------|----------|---------------|--------------|
| 1. I feel calm | ① | ② | ③ | ④ |
| 2. I feel secure | ① | ② | ③ | ④ |
| 3. I am tense | ① | ② | ③ | ④ |
| 4. I am regretful | ① | ② | ③ | ④ |
| 5. I feel at ease | ① | ② | ③ | ④ |
| 6. I feel upset | ① | ② | ③ | ④ |
| 7. I am presently worrying over possible misfortunes | ① | ② | ③ | ④ |
| 8. I feel rested | ① | ② | ③ | ④ |
| 9. I feel anxious | ① | ② | ③ | ④ |
| 10. I feel comfortable | ① | ② | ③ | ④ |
| 11. I feel self-confident | ① | ② | ③ | ④ |
| 12. I feel nervous | ① | ② | ③ | ④ |
| 13. I am jittery | ① | ② | ③ | ④ |
| 14. I feel "high strung" | ① | ② | ③ | ④ |
| 15. I am relaxed | ① | ② | ③ | ④ |
| 16. I feel content | ① | ② | ③ | ④ |
| 17. I am worried | ① | ② | ③ | ④ |
| 18. I feel over-excited and rattled | ① | ② | ③ | ④ |
| 19. I feel joyful | ① | ② | ③ | ④ |
| 20. I feel pleasant | ① | ② | ③ | ④ |

APPENDIX D1
THE STAI-S

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	①	②	③	④
22. I tire quickly	①	②	③	④
23. I feel like crying	①	②	③	④
24. I wish I could be as happy as others seem to be	①	②	③	④
25. I am losing out on things because I can't make up my mind soon enough	①	②	③	④
26. I feel rested	①	②	③	④
27. I am "calm, cool, and collected"	①	②	③	④
28. I feel that difficulties are piling up so that I cannot overcome them	①	②	③	④
29. I worry too much over something that really doesn't matter	①	②	③	④
30. I am happy	①	②	③	④
31. I am inclined to take things hard	①	②	③	④
32. I lack self-confidence	①	②	③	④
33. I feel secure	①	②	③	④
34. I try to avoid facing a crisis or difficulty	①	②	③	④
35. I feel blue	①	②	③	④
36. I am content	①	②	③	④
37. Some unimportant thought runs through my mind and bothers me	①	②	③	④
38. I take disappointments so keenly that I can't put them out of my mind	①	②	③	④
39. I am a steady person	①	②	③	④
40. I become tense and upset when I think about my present concerns	①	②	③	④

APPENDIX B2

THE STAI-T

APPENDIX E

SAI - "STATE" FORM

NAME _____

DATE _____

DIRECTIONS: In reference to the speech that you have just completed, please read each statement and then circle the appropriate number to the right of the statement to indicate how you felt in this particular speech situation. Be sure to give the answer which seems to describe your feelings in regard to this speech only.

1 = NOT AT ALL
2 = SOMEWHAT
3 = MODERATELY SO
4 = VERY MUCH SO

- | | | | | |
|--|---|---|---|---|
| 1. I felt tense while I was speaking..... | 1 | 2 | 3 | 4 |
| 2. I perspired while I was speaking..... | 1 | 2 | 3 | 4 |
| 3. While speaking, I was worried about what others thought of me..... | 1 | 2 | 3 | 4 |
| 4. The audience seemed to be interested in what I had to say..... | 1 | 2 | 3 | 4 |
| 5. I felt ill at ease using gestures in my speech..... | 1 | 2 | 3 | 4 |
| 6. I felt in a daze while I was speaking.. | 1 | 2 | 3 | 4 |
| 7. I could not think clearly while I was speaking..... | 1 | 2 | 3 | 4 |
| 8. I felt awkward while I was speaking.... | 1 | 2 | 3 | 4 |
| 9. At the end of the speech, I would have liked to continue to talk..... | 1 | 2 | 3 | 4 |
| 10. My heart seemed to beat faster during my speech..... | 1 | 2 | 3 | 4 |

11. I found myself speaking either faster or
 — slower than usual..... 1 2 3 4
12. I felt that I had nothing worthwhile to
 say to my audience..... 1 2 3 4
13. I felt relaxed while I was speaking..... 1 2 3 4
14. While speaking, it was difficult for me
 to calmly search my mind for the right
 word to express my thoughts..... 1 2 3 4
15. I felt calm while I was speaking..... 1 2 3 4
16. My fingers or hands trembled while I was
 speaking..... 1 2 3 4
17. I felt relieved at the conclusion of the
 speech..... 1 2 3 4
18. I felt self-confident while I was speak-
 ing..... 1 2 3 4
19. While speaking, I was afraid of making an
 embarrassing or silly slip of the tongue. 1 2 3 4
20. While I was speaking, my words became
 confused and jumbled..... 1 2 3 4
21. While I was speaking, I was afraid of
 forgetting my speech..... 1 2 3 4
22. While I was speaking I felt poised..... 1 2 3 4
23. My posture felt strained and unnatural
 while I was speaking..... 1 2 3 4

APPENDIX F

THE AAC

Below you will find words which describe different kinds of feelings. Check the words which describe how you feel at this moment. Some of the words sound alike but I want you to check all the words that describe your feelings.

- | | | |
|--|---|--|
| 1. <input type="checkbox"/> AFRAID | 21. <input type="checkbox"/> GAY | 41. <input type="checkbox"/> PANICKY |
| 2. <input type="checkbox"/> AGITATED | 22. <input type="checkbox"/> GLOOMY | 42. <input type="checkbox"/> PEACEFUL |
| 3. <input type="checkbox"/> ANGRY | 23. <input type="checkbox"/> GRIM | 43. <input type="checkbox"/> PLEASANT |
| 4. <input type="checkbox"/> BITTER | 24. <input type="checkbox"/> HAPPY | 44. <input type="checkbox"/> RATTLED |
| 5. <input type="checkbox"/> CALM | 25. <input type="checkbox"/> HELPLESS | 45. <input type="checkbox"/> SAD |
| 6. <input type="checkbox"/> CHARMING | 26. <input type="checkbox"/> HOPELESS | 46. <input type="checkbox"/> SECURE |
| 7. <input type="checkbox"/> CHEERFUL | 27. <input type="checkbox"/> INSECURE | 47. <input type="checkbox"/> SENTIMENTAL |
| 8. <input type="checkbox"/> COMPLAINING | 28. <input type="checkbox"/> JEALOUS | 48. <input type="checkbox"/> SERIOUS |
| 9. <input checked="" type="checkbox"/> CONTENTED | 29. <input type="checkbox"/> JOYFUL | 49. <input type="checkbox"/> SHAKY |
| 10. <input type="checkbox"/> CONTRARY | 30. <input type="checkbox"/> KINDLY | 50. <input type="checkbox"/> SOLEMN |
| 11. <input type="checkbox"/> COOL | 31. <input type="checkbox"/> LIGHT-HEARTED | 51. <input type="checkbox"/> STEADY |
| 12. <input type="checkbox"/> CROSS | 32. <input type="checkbox"/> LONELY | 52. <input type="checkbox"/> TENDER |
| 13. <input type="checkbox"/> DESPERATE | 33. <input type="checkbox"/> LOVING | 53. <input type="checkbox"/> TENSE |
| 14. <input type="checkbox"/> EASY GOING | 34. <input type="checkbox"/> MAD | 54. <input type="checkbox"/> TERRIFIED |
| 15. <input type="checkbox"/> FEARFUL | 35. <input type="checkbox"/> MEAN | 55. <input type="checkbox"/> THREATENED |
| 16. <input type="checkbox"/> FEARLESS | 36. <input type="checkbox"/> MERRY | 56. <input type="checkbox"/> THOUGHTFUL |
| 17. <input type="checkbox"/> FRETFUL | 37. <input type="checkbox"/> MISERABLE | 57. <input type="checkbox"/> UNCONCERNED |
| 18. <input type="checkbox"/> FRIENDLY | 38. <input checked="" type="checkbox"/> NERVOUS | 58. <input type="checkbox"/> UNEASY |
| 19. <input type="checkbox"/> FRIGHTENED | 39. <input type="checkbox"/> OVERCONCERNED | 59. <input type="checkbox"/> UPSET |
| 20. <input type="checkbox"/> FURIOUS | 40. <input type="checkbox"/> OVERWHELMED | 60. <input type="checkbox"/> WARM |
| | | 61. <input checked="" type="checkbox"/> WORRYING |

APPENDIX G

THE PRCS

This instrument is composed of 30 items regarding your feelings of confidence as a speaker. Preceding each statement is a "true" (T) and a "false" (F). Read each statement and decide whether, as regards a given statement, "true" or "false" most represents your feelings associated with your most recent speech, and then circle the T or the F as appropriate for your answer. Do not spend too much time on any one item as we only want your first impression of an answer. Please remember to answer every item.

- | | | | |
|---|---|-----|---|
| T | F | 1. | I look forward to an opportunity to speak in public. |
| T | F | 2. | My hands tremble when I try to handle objects on the platform. |
| T | F | 3. | I am in constant fear of forgetting my speech. |
| T | F | 4. | Audiences seem friendly when I address them. |
| T | F | 5. | While preparing a speech I am in a constant state of anxiety. |
| T | F | 6. | At the conclusion of a speech I feel that I have had a pleasant experience. |
| T | F | 7. | I dislike to use my body and voice expressively. |
| T | F | 8. | My thoughts become confused and jumbled when I speak before an audience. |
| T | F | 9. | I have no fear of facing an audience. |
| T | F | 10. | Although I am nervous just before getting up I soon forget my fears and enjoy the experience. |
| T | F | 11. | I face the prospect of making a speech with complete confidence. |
| T | F | 12. | I feel that I am in complete possession of myself while speaking. |
| T | F | 13. | I prefer to have notes on the platform in case I forget my speech. |

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- T F 14. I like to observe the reactions of my audience to my speech.
- T F 15. Although I talk fluently with friends I am at a loss for words on the platform.
- T F 16. I feel relaxed and comfortable while speaking.
- T F 17. Although I do not enjoy speaking in public I do not particularly dread it.
- T F 18. I always avoid speaking in public if possible.
- T F 19. The faces of my audience are blurred when I look at them.
- T F 20. I feel disgusted with myself after trying to address a group of people.
- T F 21. I enjoy preparing a talk.
- T F 22. My mind is clear when I face an audience.
- T F 23. I am fairly fluent.
- T F 24. I perspire and tremble just before getting up to speak.
- T F 25. My posture feels strained and unnatural.
- T F 26. I am fearful and tense all the while I am speaking before a group of people.
- T F 27. I find the prospect of speaking mildly pleasant.
- T F 28. It is difficult for me to calmly search my mind for the right words to express my thoughts.
- T F 29. I am terrified at the thought of speaking before a group of people.
- T F 30. I have a feeling of alertness in facing an audience.

APPENDIX H

INTRODUCTION TO TREATMENT - SD GROUP

There is a widely accepted theory in psychology that anxiety is a learned phenomenon and as such can be "unlearned". Currently there exists a treatment procedure which has been effectively employed to unlearn or remove anxiety. In these sessions this treatment will be used to help you get rid of your anxiety related to public-speaking.

The treatment procedure firstly requires that you be trained to relax your muscles and body. Having done this you will then be instructed to image certain situations or scenes that I will describe to you. These scenes are related to your anxiety and have been compiled from information obtained from each of you in the interview. When the scenes are being described you must try to image them as clearly and vividly as possible but to remain relaxed as you do so. It is very important for you to understand that the effectiveness of this technique depends on your ability and willingness to image the scenes and to keep relaxing throughout. To help you to maintain relaxation I will first present scenes which should be only slightly anxiety-arousing. As each member of the group comes to be able to image a scene without experiencing anxiety then I will present other scenes which may be slightly more anxiety-arousing than previous scenes. Again, when these new scenes no longer evoke anxiety for all members then other scenes which may be even more arousing will be

presented, and so on. The theory behind this technique, briefly put, is that if you can relax while exposing yourself to anxiety-arousing images then the anxiety should gradually weaken and eventually be completely removed.

The series of scenes of progressively increasing arousal potential make up what is called the "anxiety hierarchy". We will commence to work through this hierarchy in the second session, with relaxation training occupying most of the time of this first session.

There is to be absolutely no talking with each other during the sessions.

APPENDIX I

INTRODUCTION TO TREATMENT - FLD GROUP

There is a widely accepted theory in psychology that anxiety is a learned phenomenon and as such can be "unlearned". Currently there exists a treatment procedure which has been effectively employed to unlearn or remove anxiety. In these sessions this treatment will be used to help you get rid of your anxiety related to public-speaking.

Specifically, you will be instructed to image certain situations or scenes that I will describe to you in detail. These scenes are related to your anxiety and have been compiled from information obtained from each of you in the interview. These scenes are such as to evoke an intense anxiety reaction. You are not to avoid or escape the aroused anxiety, but rather, if treatment is to be effective, to fully experience the anxiety and "live" the scene as vividly as possible. The theory underlying this procedure is relatively simple. In virtually all cases of anxiety the crucial factor maintaining the anxiety is a strong wish to avoid or escape anxiety-arousing situations. Therefore as long as the wish persists, reciprocally the anxiety will persist. However if you can persuade yourself to experience the anxiety without trying to avoid it then the vicious circle of anxiety leading to the escape urge leading to more anxiety can be stopped. This technique then requires that you experience the anxiety deliberately and fully. When the scenes are being described

to you visualize yourself as actually being in the anxiety-arousing situation and concentrate on the anxiety itself while inhibiting any wish to avoid, escape, or diminish the intensity of the reaction. Attend as actively as you can and experience as fully as you can the unpleasant emotions and all the concomitant bodily sensations that are aroused. It is very important for you to understand that the effectiveness of this technique depends upon your ability and willingness to allow yourself to fully experience the anxiety without compromise. Each time you feel a spontaneous wave of alarm do NOT push it aside. Enhance it, augment it, try to experience it more and more profoundly. If you do not spontaneously feel anxiety building, then make a special, deliberate effort to do so no matter how difficult it might seem.

There is to be absolutely no talking with each other during the sessions.

APPENDIX J

INTRODUCTION TO TREATMENT - D-P GROUP

There is a widely accepted theory in psychology that anxiety is a learned phenomenon and as such can be "unlearned". Currently there exists a treatment procedure which has been effectively employed to unlearn or remove anxiety. In these sessions this treatment will be used to help you get rid of your anxiety related to public-speaking.

Many theorists believe that public-speaking anxiety is related to certain basic deficiencies in social communication. They advocate that to eliminate the anxiety one must re-learn old communication skills, learn new skills, and have a rational understanding of the communication process. One must discover the variables leading to effective communication, discover one's deficiencies in this area, and then through feedback and analysis to apply those variables to correct and modify one's style of communication. Treatment methods based on this theory thus stress a rational-learning approach to anxiety removal rather than an emotional-sensitivity approach. Recently these methods have become more and more popular and have been widely employed with good success.

In the treatment sessions to follow the emphasis will be on increasing your skills of interpersonal communication in a relatively anxiety-free atmosphere. Specifically, you will be instructed to participate in a communication-skills task or exercise during each

session. Each task presents a problem which requires group discussion and consensus to arrive at a resolution. In a sense what we will be doing here is a workshop on the training of individuals in one's effectiveness in interpersonal speaking - that is, training ourselves to speak in a relatively calm, and relaxed manner. As I mentioned before, this technique has been used by others and has been shown to work. However the effectiveness of the technique depends upon your willingness to participate in the discussions necessary to complete each task.

APPENDIX K

GUIDE FOR PRACTICE IN VISUALIZATION OF NEUTRAL IMAGERY

As a preliminary to visualizing the anxiety related scenes that I will describe to you let us take some time first to practice our ability to visualize scenes vividly and clearly. The scenes that I will describe to you now should arouse no anxiety and are only intended to provide training in visualization. When visualizing these scenes it is extremely important that you picture yourself in the scene, as if you were actually there and NOT as if you are watching from the outside. Play the actor and not the interested audience.

Visualize yourself:

- sitting at home in your living room watching T.V.
- taking a shower in the morning
- going to your mailbox to pick up the mail
- eating supper
- taking out the garbage
- taking a drive around the block
- making a snowball and throwing it

APPENDIX 1
RELAXATION TRAINING

PRELIMINARY INSTRUCTIONS

Now we are going to commence training in muscular relaxation. Close your eyes and concentrate on what I say. Leave your eyes closed until I tell you to open them again. Make every attempt to comply with the instructions to the best of your ability because the effectiveness of the treatment procedure depends upon your ability to relax properly and without difficulty.

Before learning the relaxation method, it is most important for you to understand that relaxation is not a matter of doing something, but rather a matter of not doing something. Essentially it consists of not exerting the effort it takes to tense your muscles. I would like to emphasize this again by pointing out that relaxation is primarily a releasing of the hold you have on your muscles; any attempt on your part to force relaxation immediately sets up an effort which makes relaxation impossible. Relaxation is a letting go of tension, a ceasing of effort, a state of not doing.

Another point I wish to make is that relaxation as a general state of your body is best approached indirectly. You are not going to be asked to relax, but instead to release your hold on individual muscles, or muscle groups. When you do this properly, relaxation results automatically.

Experiments have shown that one of the major reasons people can-

not relax is because they have stopped paying attention to their sensations of tension and therefore cannot recognize them when they exist. Since people are not really aware of the tenseness of their muscles they may believe that they are relaxed when in fact they are quite tense, and vice versa. Tensing the muscles before relaxing them will help you to become aware of this tension so that you may more readily recognize it and deal with it. (Pause 10")

Each instruction that follows contains directions on first tightening and then relaxing certain muscles. You will first be asked to tense the muscles and then to relax it. In letting go of the tension you will experience a rather pleasant sensation. This feeling is not mysterious in any way, but occurs as a result of paying attention to the difference between tensing and relaxing the muscles. By concentrating on this difference in feeling, you will become aware of how much more relaxed you have become by simply letting go of your muscles so that the chair supports your body rather than the tension of your muscles.

I will tell you when and which muscles to tense and to release. Do not tense or release the muscle unless specifically told to do so.

INDUCTION PROCEDURE

Now settle back comfortably. Rest your arms at your sides. If your legs are crossed, uncross them. Let yourself go as limp as possible. Breathe slowly and easily. Just pay attention to your breathing in and breathing out. (Pause 5") Keep breathing slowly and

easily. (5") Let yourself become more and more limp. (5") Release your muscles and let them grow more and more limp. (20")

Now slowly bend your right hand back at the wrist. Notice the tension at the top of your arm between the wrist and the forearm. I want you to attend to this sensation of tension throughout your forearm. Experience it as fully as possible. (5") Hold your hand in this position and feel the tension. (20") Feel the tension. (10") Now slowly release your hand and return it to your starting position. (10") Notice the difference between tension and release. (10") Even when your hand has returned there may be residual tension. (5") Attend to this, and let your forearm grow less and less tight. Feel the difference between tightness and release. (20")

Once again bend your arm back at the wrist and feel a tightening of your forearm muscles. (10") Feel the tension. (10") Feel it as fully as you can. (10") Now slowly release your hand and let it return limply to its starting position. (10") Just simply leave it limp. (20")

Now bend both of your hands back at the wrist and hold this position. (10") Hold it and feel the tension. (20") Now slowly return them to their starting position. (10") Leave them limp with no support at all. (20")

Now bend your wrists forward and notice the tension under the forearm. Hold this position and become aware of the tension. (10") Concentrate and feel the tension. (20") Now slowly return your hands

to their starting position. Leave them as loose as you can. (30")

Now bend your arms tightly at the elbow. Make a muscle and feel the tension in the bicep muscles in the upper part of your arm. Hold this tightly and feel the tightness. (10") Feel that tight sensation. (20") Now slowly return your arms to their starting position and notice the tension dissolving. Notice the tension slowly disappear. (10") Just remain with your arms relaxed. (20") Now hold your arms out straight and feel the tension throughout your arms. (30") Slowly bring your arms down to their starting position and notice the difference...the easy, loose, effortless, lazy feeling. (30") Release the tension more. (10") Even more (20") Now shrug your shoulders. Bring them way up around your ears and feel the tension in your shoulders and neck. Pay attention to the muscles involved as tension builds. (20") Feel the tension. (10") Now slowly let your shoulders go limp. Release your shoulders and let them return. (20") Release them more and feel the relaxing, soothing, comfortable feeling. (20")

Now pull your shoulders back as if you were standing at attention. (10") Feel the tension between your shoulder blades. (20") Slowly let your shoulders sag and release the tension. Let them go limp. Note the loosening, relaxing sensation. (10") Let them go more and more limp. (30") Now slowly bend your back into an arch. The middle of your back should be hollow. Feel the tenseness in the lower part of your back. It should be very tight. (20") Now

straighten your back and let it go limp. Release all hold on your back muscles. (20") Release them more. (20") Feel the relaxation and comfort that comes as the tension is released more and more. (20")

Now review the muscles of your body which you have relaxed and if there is any tension at all in any of these muscles, relax them further. by tensing the muscle group and then releasing it as you did before. Go ahead and relax any muscle you feel could be even more relaxed than it feels now. Just let yourself go so that you are very relaxed and comfortable. You will be given a minute to do so before we go on.

Now the next group of muscles we will be concerned with involve the legs and thighs. Straighten your legs as comfortably as you can. Your legs should be a few inches off the floor. Now bend your feet at the ankles toward the knee. Notice the tension in the shins. Hold the position and notice the tension. (20") Now slowly let your legs return to the floor and return your feet to their starting position. Release the tension in your legs. Just let yourself go and relax. (20") Release more. (20")

Now straighten your legs at the knees. Make your legs as straight as possible. Hold this position and notice the tension between your hips and your knees. Hold this and become aware of the tension. (20") Now slowly let your legs go limp. Let them go limp all the way. (20") Release all tension from your legs. Notice how relaxed the muscles have become. (20")

Now tighten your stomach muscles. Make the abdomen hard and tense

the muscles as if you are prepared to take a punch in the stomach. Hold this and become aware of the tightness of these muscles. (20") Now let go of your stomach muscles. Let them become soft and limp. Notice the release of tension. Feel your breathing become easier, slower, and more regular as you relax. Feel the calmness and the looseness as you relax your muscles more...(20")...and even more. (20")

Now review the muscles which you have relaxed and if there is any tension remaining, relax them further by simply paying attention to the sensation you experience in letting go after first tensing them. Go ahead and relax any muscle you feel may be even more relaxed. You will have a minute to do so before we continue.

Now the last group of muscles, and usually the most important for relaxation, are those of the face and the neck. Settle back in your chair and let yourself go. (10") Now frown or wrinkle your forehead. Pretend you are squinting as if to read small print. Squint hard. Now hold the frown and feel the tension in the muscles above your eyes. (30") Now smooth out the muscles. Feel your muscles becoming more and more smooth. (30") Notice the feeling of release of your forehead muscles. (20") Now raise your eyebrows as high as you can. Hold them there. Notice the tension in your forehead. (20") Now gradually let go. (10") Release your forehead muscles even more. (20")

Now open your eyes and look up. (10") Keep looking up. Just

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keep your eyes gazing upward, up as high as you can. (20") Now look to the right. Don't turn your head to look, just the eyes. Hold them looking to the right. (30") Now to the left. Remember turn the eyes only and not the head. Look as far to your left as you can. (30") Now look down. Look as far downward as you can. (30") Now bring your eyes back to their regular position. Close them as tightly as you can. (10") Feel the tension surrounding your eyes. (20") Now keep your eyes closed but release your hold on your eye muscles. Loosen the muscles and feel the comforting release. (20") Release more and pay attention to these muscles as they relax. (10")

Now clench your jaws. Tighten your jaw. Close them as tightly as possible. Notice the tension in your jaw muscles. (20") Now release these muscles and let your bottom jaw open slightly. Let your jaws go limp. (10") Feel the pleasant sensation of release and looseness. (20")

Now tighten your lips. Make your lips into a fine line. Press tighter and tighter, as tight as you can. (5") Now release your lip muscles ever so slightly. (10") Release more. (10") Release them all the way and feel the warm and relaxed flowing sensation. (20")

Now tighten your neck muscles. You can do this by raising your shoulders slightly as you tighten the muscles in your neck. Hold this. (20") Now release your neck muscles. Let them go limp. (10") More and more limp. (20")

Now review the muscles of your body. Even though you may feel more relaxed than ever before, you can become even more relaxed yet by letting go even further so that there is no tension at all in any of your muscles. Relax completely. Relax every muscle of your body. Just let yourself be limp...more limp...completely limp. Relax more and more and even more. Relax completely. Your whole body feels now so relaxed that only the chair supports you. Relax deeper and deeper. (30") Release all the muscles of your body. (10") Release them more. (10") Now starting at 10 I want you to release yourself completely, to let go completely of all hold you have on your muscles.

10. Let go. Feel yourself becoming more and more limp. (10")
9. Release even more. Let go even more. (10")
8. Continue to go deeper and deeper into this state of calm. (10")
7. Relax. Go even more and more deeply. Feel yourself sinking into yourself. (10")
6. Continue to let go into this deeper and deeper calm. (10")
5. Let go even more. (10")
4. Even more. (10")
3. More. (10")
2. More. (10")
1. Allow yourself to go completely for one minute. (1')

Good. Now open your eyes and tense your muscles just enough to get them back to their normal tone. We will continue with the remaining aspects of treatment in a minute or two.

APPENDIX M

SD TREATMENT GROUP: THE ANXIETY HIERARCHY

(Scenes progress from lowest to highest anxiety-arousing potential.)

1. It's the evening before your speech and you're sitting at your desk thinking about what you're going to say.
2. It's the night before your presentation and you're lying in bed thinking about the speech you have to give tomorrow at noon.
3. It's the morning of the day that you have to present and as you get up all you can think about is that speech which is now only hours away.
4. You're thinking about that speech as you get ready to leave for school.
5. You're on your way to school now and as you notice the time ticking away all you can think about is that speech at noon.
6. You're at school and you head to the Centre to have a coffee while you work over your presentation.....it's almost 10 o'clock, just two hours away from class time.
7. You go to the library still thinking about that speech which is now only one hour away.
8. Now you're walking toward the building where you have to make your presentation.....it's already a quarter to 12.
9. You're thinking about that upcoming speech as you open the door to the building.
10. You're walking toward the room where you have to make your presentation...it's 10 to 12 now.
11. You're in your seat waiting for class to start...it's just a few

minutes before 12 and that speech just minutes away now is all you can think about.

12. The prof has just called the class to attention and you're anticipating your name to be called any second now.
13. Your name is called and as you get up and walk to the front of the class you're thinking about that speech and how you're going to do.
14. You're at the front of the class now and you're thinking how to commence your speech.
15. You're about a minute into your speech now and you force yourself to look at the audience and notice the reactions of various people.
16. As you talk longer you're completely self-conscious of what you're doing and how you're feeling.
17. You're thinking about what your audience must think about your presentation...and of you personally.
18. You're coming to a crucial point you want to get across now but you discover that your notes on it are missing...you realize that you're going to have to ad lib it completely.
19. Time is running out on you and you haven't covered all the essential points yet.
20. As time runs out on you you see all the negative reactions of your audience.
21. You walk back to your seat thinking of how poorly you did.

APPENDIX N

FLOODING TREATMENT GROUP

SESSION #1 - SCRIPT #1

Imagine that you are taking a course with a number of people whom you have never met before....Everybody is a complete and total stranger....Every time you walk into class you look at all those different faces, hear all those different voices, and they all seem as strange as if you had never encountered them before....No one in particular ever speaks to you and you manage to avoid having to speak to any of them....Sure, occasionally you'll say hello and goodbye and even on the rare occasion make some light chatter and such but you have never really carried on a decent or satisfying conversation with any of them ever before....In fact, you hardly ever participate in class discussions of any kind....You are always in the background when it comes to expressing your opinions, views, or anything else you may want to or have to talk about....You always experience a certain tenseness, nervousness, and general discomfort when you get involved in speaking situations such as in front of class....And this nagging anxiety is now so overpowering that your grades have suffered considerably....And you have lost hope not only in your ability to eliminate this anxiety but also in your ability to control it from getting out of hand....It is so bad that you make every effort possible to avoid having to speak in front of a group....And when given no other choice but to speak in front of others

you pray all the while that you will be able to conceal from them the tightness you feel in your gut, the extreme difficulty you have in concentrating, and the pervasive uncontrollable shuddering that grips and enslaves every part of your body....And you await with almost half-crazed desperation the time when you'll have finished, the time when all that tension subsides and the focus of attention drifts onto some other unfortunate....And you are painfully aware all the while that you have failed miserably to convey the information as you desired....You have never been able to reach your audience, at least you have never felt you have....And lurking deep in your mind is that omnipresent strangulating fear that one day you will be discovered, that one day your anxiety will simply explode.

Well today you walk into class and after everyone gets settled in their seats the professor starts to talk....He says that he is dissatisfied that class participation has been so poor and that he is uncertain as to whether people have in fact understood the material he has presented....Therefore he has decided that for this class he is going to suspend his planned lecture and wants instead that the class participate in a sort of panel discussion of some of the topics and ideas that have been covered this semester....And he goes on to say, and quite forcefully at that, that he expects each and every member of the class to participate....More specifically, he wants everyone to have at least a few minutes to present their views in detail....Following each such presentation questioning, criticism, and refutation.

by others are expected....Finally, he says that final grades will depend quite heavily on your performance here today....Well as soon as you hear this you can feel the butterflies in your stomach, that unmistakably sickening sensation....You feel your body getting hotter and hotter....Oh, that piercing, penetrating heat....You feel your heart pulsating a mile a minute....It's loud and pounding....It's irregular....It's racing....It's missing beats and that scares the daylights out of you even more....And the prof keeps talking and re-emphasizing the point that everyone must contribute; everyone will have to clearly present their view and will be expected to comment on the views of others....Everyone will have to speak today....no one must be left out....Now you realize that you cannot escape speaking up during class....You realize that no matter what you do or however hard you may try to avoid speaking for any length of time you will be expected to talk and evaluated on your performance....like it or not....And whatever you say better be sensible and clear because otherwise you'll come out looking like a stupid fool right in front of all your fellow classmates and especially the prof....And now you find out that notes will not be allowed....and what's more you're going to have to be ready to defend yourself if someone questions or challenges your statements....You know that you're going to be placed on the spot today....and you're not even prepared....You haven't reviewed the material in over a month....You can hardly remember what went on even for the last few lectures....How the hell can you ever expect to

be able to speak confidently on the topics then?....Boy are you scared now....You can feel that tension building....It's growing more and more....It's like a cancer....It's engulfing you and you're helpless before it....And now you're experiencing difficulty breathing....Suddenly that easy automatic feeling has disappeared and is replaced by a struggling and stressful effort for deep gasps of air....And you're trying to fight off that choking, suffocating sensation and the dizziness that it brings....You're fidgety all over....You don't know where to place your hands, your feet....You're moving nervously in your chair....Your muscles are getting tight, tighter, and even tighter....They're so tight now that you can almost feel the pain....Sure, you've had these anxiety attacks before....but now you can feel that this one is worse than ever....You know full well that you're going to have to talk;....it's inevitable,....there can be no escape....And you know that you're not prepared....You know that you're going to be evaluated....And you're bound to be questioned and criticized....It's terrible now and most assuredly it can only build to a more horrible climax....and you're powerless to prevent it....Your mind is racing trying to grab images of all the possible terrifying outcomes you can imagine....A shudder comes over your body as you think of them....And now your hands start to tremble....You're getting flustered all over....You're already beginning to perspire....That smelly odor coming from the drippy wetness is oozing forth....and it is hot, oh, so hot all over....And you can sense that fear, that anxiety, that

nervousness, Building more and more....You can't stop thinking of the prof standing up there looking at everyone....searching....scrutinizing....trying to discover who's not participating in the discussions that have now been in progress for quite a while....And so far you've managed to stay out of it....You've been so scared to speak for fear that as soon as you open your mouth all the tension inside you will just increase and burst out uncontrollably....Then they'll all see you as you really are....in this foolish, cowardly, and almost panicky state....And suddenly without warning you hear your name called.... You immediately freeze with surprise mixed with a sudden pang of anxiety....Your body is stiff, gripped in a mass of tension....Your muscles are tightened so hard that you can feel the pain....Oh, that pain....Boy are you ever shaky now....Your heart is pounding so loudly and so strongly you can feel your entire body under its sway.... You can't concentrate on anything, your mind is in total confusion; there are only fleeting and unconnected images....Now as you strain to reconcile your thoughts you come to that awesome and stressful realization that everyone's eyes are focused directly on you....The time, that dreadful time, has finally come....The prof has asked you to speak on a certain topic seeing as you have been the only one now who has refused to speak up voluntarily....And of all the horrible malevolent luck, the topic he has given you is one you're sure you know little about....Now it's all going to come true....your worst fears are going to be realized....You're probably going to louse up

real bad, you can feel it....And all that tension is mounting and mounting unceasingly....Eating away at your body, at your nerves.... It's weakening you....And as you valiantly try to screw up courage to attempt an acceptable speech you immediately find yourself groping for words....It's as if everything is at the tip of your tongue but nothing is coming out as it should....It's almost as if your mind has gone blank....And the upsurge of anxiety continues without end....Now you try to say something but all you get is a weird, quivering, non-sensical sound....It's more a muted cry than anything else....Your anxiety is seeping through and is giving you away....Boy do you look foolish now....And all of them watching you....watching you very closely....picking up and looking for mistakes on your part....You can sense that they know that you're as anxious as hell....It's no use pretending....The cat is out of the bag....and you're looking more and more foolish, sitting there flushed in the face, shaking all over, fidgeting, hesitating....And now stuttering and mumbling half audible and certainly incoherent phrases....You're like a child, a silly little child, scared of no one and yet everyone....sitting meekly huddled into it's seat in the corner of the room...!The sight is sickening....truly sickening....And now the prof calls your name again....he's adamant....He says if you don't pull yourself together and speak coherently you'll fail for sure....He's irritated by your procrastinations....He says it's time you learned to shape up....By now you're on the verge of panic....He's made you feel like a sissy

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and a dim-wit by implication....You're frightened and tense but again you force yourself to say a few sentences....But that quivering, shaky voice is still there now even worse than before....But you go on.... And now you find yourself talking too fast, you can't slow down.... your mind is racing so fast it's scaring you....You're not at all sure of what you're saying....You may even be contradicting yourself for all you know....And those crazy wrong words keep slipping in every once in a while....And now just as you've finished that idea your mind again goes blank....That slight moment of hesitation and before you know it it's all gone....You're groping blindly for words again....you must be saying "ah" a million times....You clear your throat over and over again but all the delays don't seem to help....you just can't seem to get a train of thought going....That damn interfering anxiety....it's not letting you think....You're entirely self-conscious of your tenseness and of how bad you must be coming across....That hot, hollow, queasy feeling is still there and becoming worse and worse....Your stomach is like a spinning wheel....everything feels like it's rolling around aimlessly in there....It's as if everything is caught up in the chest area....it's a nauseating feeling....You hope to god you don't throw up....You can't look at your audience....Those staring eyes frighten you....Jesus you feel like a freak on spectacle....You're afraid to see their reactions....you're sure they must be thinking the worst....And that perspiration trickles down your body....that itching, irritating sensation of your body covered in all that sweat and odor

....And that heat, especially on your face now....It feels like a ball of fire....Your facial muscles are so tense they're beginning to hurt....And your stomach is in knots....That sickening, nauseating feeling is getting worse and worse....Your mouth feels dry and raspy....you swallow, swallow again but there's no relief....No relief at all....the feeling only gets worse and worse....And now you feel your back aching....your entire posture feels strained....You're completely uncomfortable but no matter which way you move again you find no relief....And your heart continues to pound loudly....it's almost deafening....And your breathing again becomes strained and effortful....Your chest is expanding and contracting violently with all that visceral pressure....And no matter how hard you may try your speech is as bad as ever....You blurt out a sentence or two here and there but there's nothing resembling a well-organized production....your sequence of ideas is completely disjointed....And that grade keeps popping into your mind....You can't help but think of the evaluation you must be getting....Pretty poor at best....and it meant so much to you....You needed....you wanted a good grade so desperately....and now it's lost for sure....Your lips start to tremble as you try to express your thoughts once more....You try to look up at the audience, you force yourself to look at them but their faces are blurred....You find yourself looking at this one person sitting right in front of you....You can't take your eyes off him even if you had wanted to....It's as if your locked into staring at this one person....It's too

anxiety-arousing to look at the other people....That blurriness now increases as your eyes continue to tear....Now you can't even look at this one person in front of you....You don't know what to do with yourself, that tension feels unbearable....And you keep mixing up your ideas, using wrong words, and speaking in a squeaky, shaky tone of voice....That fear is seeping through more and more....And now you're almost certain that they all don't think particularly highly of you....Certainly not after this despicable, and pitiful exhibition of yours....You feel that they must be looking at you with an air of superiority....And yes, you feel inferior....You feel downright stupid, ridiculous, ashamed, and embarrassed....You've fumbled your entire presentation and that nagging overwhelming anxiety is disturbing you more and more....It's as if you can't concentrate on anything else but that growing cancerous tension and nervousness....It's tearing you apart....And that upset, ill-at-ease stomach....That trembling sensation....That feeling of nausea and headache....Yes they're all there and many more....getting worse and worse....And as you talk hesitatingly, gropingly, shakily, virtually incoherently, you have a sense of total loss....You feel you can never again face them....never again look them in the eye....not after this humiliation....this put-down....Everyone you're sure will remember this day....this impression of you....they'll never forget....And wait a minute....Someone just interrupted you and is criticizing what you said....Boy are you being put down....And right in front of everyone....And now another class

member joins in the criticism....And now even the prof speaks up and criticizes you....It's like they're all getting into the act....They're all criticizing, ridiculing you....They say that you don't know what you're talking about....They say your statements are contradictory and illogical....They say that they couldn't help but notice your excessive uptightness and anxiety in speaking....Boy, now you really feel low.... You know they're damn right....You know it's all true....And they know all about you now....You feel humiliated....utterly and shamefully humiliated....You feel like just getting up and running out of that room....You can't take any more of this....you feel like you just have to get away or else your anxiety will explode....You can feel it all boiling and boiling more and more inside of you....It's like a cauldron, steaming and burning incredibly intensely....It's simply unbearable....And there is no shelter for you....there is no security....no support....You're all alone....And it's getting more and more intenseYou have great difficulty breathing at a steady pace....And that choking, suffocating, dizzy sensation is back at full force....And your muscles are so tight the pain is unbearable....There is no numbness.... it's pure raw pain....And the heat of your body is devastating....It's as if you had been stranded in a desert for days on end....Your mouth is so dry....your lips are so dry....your lips are trembling....And that sinking empty sensation in the pit of your stomach....And that dripping, irritating, smelly perspiration....And all those people laughing inside themselves at you....Sneering, ridiculing....critic-

izing....doubting....rejecting....castigating....sneering....And suddenly you feel faint all over....You feel an eerie twirling, buzzing sensation in your head....And all you can hear now are muffled voices....All you can see are blurred faces....And that horrible tension mounting ever more....to a peak....It's overpowering....It's maddening....You can't stand it any more....You try to escape by darting to the doorway, but you're completely disoriented and you stumble over, falling to the ground....The anxiety increases even more....It's at an unbelievably high pitch now....And you're lying there half-crying....half-dazed....And you try to get up, stumbling crazily....groping to reach that door....to let you out of this maddening class....away from the humiliation....the degradation....the tension....Your burning to run the hell out of there....to escape from there....The anxiety has totally gripped your body....and ensnared your mind....And as you stumble some more toward the door....you never make it....You faint right there in front of everybody.

APPENDIX O

FLOODING TREATMENT GROUP

SESSION #2 - SCRIPT #2

You're looking for a job and just this morning you received a call from this one place asking you to come down for an interview tomorrow at 10 in the morning....You're extremely excited that this place called and is considering hiring you....This is a place you'd really like to get into....The work is just right....It's exactly what you want....And the pay is more than most other places are offering....However you immediately think of what the interview situation will be like....You anticipate that there will be a number of top people in the room, each questioning you in turn....and you sitting there....in the middle....alone....answering....trying to speak coherently and intelligently....and wanting above all else to make a good impression....As you think about it....you can feel the tension in your body....You can feel that familiar jittery, hot feeling all over your body....That nervous sensation that you get each time you have to speak in front of people....especially when they're in a group....You feel that your anxiety in speaking in these situations has loused you up before and that you've missed out on many good opportunities as a result....You've never been able to relax, to be at ease, to be natural....Instead you've always been up-tight, extremely self-conscious, and just generally nervous....Well you sit down at your desk now and you start thinking about the quest-

ions you can expect them to ask you and of the answers you should give....You're sitting there thinking of what you want to say and how you want to say it....And even as you sit there trying to concentrate, trying to make notes, trying to memorize....even as you do all these things you feel a certain uneasiness....Your stomach is queasy.... like it's all tied up in knots....You're fidgety and can't find a comfortable seating position....You get up and sit down over and over again....You pace back and forth....back and forth....You're so impatient you don't know what to do with yourself....And the interview is only tomorrow....If you're this tense now imagine how bad it can get when you'll be actually in there facing those guys....A spiking shudder whips through your body....And all day long all you can think about is that interview tomorrow at 10....You're having supper now but you can't eat....you've lost your appetite....Eating has now become a chore....You have to make a deliberate effort to swallow....You pick at your food....No matter how hungry you may have been when you sat down to eat, food now no longer interests you....In fact you can feel that you haven't digested anything you've swallowed....It's all stuck up around your chest area....You can't even look at the food now....it's making you sick....All you can think about is that upcoming interview in the morning....You really want that job but you know that you're going to be as tense as hell when you get in there....You know what you're in for and you're scared even thinking about it....You stay up at night working over

In your mind the questions....the answers....trying to get a clear picture of the situation....the room....the people....and you....You re-hash over and over again what you're going to say....You work on your gestures, your seating posture, your voice....And you work on appearing kinda loose....like smiling once in a while without that nervous twitch in your cheeks....without giving yourself ways....If they ever find out how uptight you are they'll never hire you and there's no two ways about it....You have to make like you're on top of the situation, like you're in control....And you know you have to work on these things because this is where you always foul up.... You've never once been able to handle yourself in a comfortable and confident manner....Your self-esteem is extremely low....Finally you get to bed but your body is wide awake....You're restless.... You toss and turn....That interview tomorrow is the only thing on your mind....When you get up in the morning you feel even worse than when you went to sleep last night....Your body aches all over from all that tossing and turning....Your neck feels stiff and painful.... You feel tired and worn out....It must have been hours before you finally fell asleep....You're moody....grouchy....and don't know what to do first....That upcoming interview still fills your mind and it's now only hours away....You're still thinking about it as you get washed....dressed....and make breakfast....You gulp down your coffee and even though you're hungry from not having eaten last night you still can't look at food....It makes your stomach turn....Your

stomach is now so tensed up, so full of those butterflies that you almost feel like throwing up but you manage to hold it in....And all the while you feel sick and nauseated....You notice the time.... and see that it's close to 9....just 1 hour away from the interview now....You realize that you'll have to rush to make it on time.... And that tense feeling keeps building as you run out that front doorAs you're rushing by you pass a friend....You hear something being said to you but you can't quite make it out....your mind is only on one thing....that interview....It sounded like hello how are you this morning, but you're not sure....You answer something back very quickly and briefly and don't even turn your head to acknowledge that friend's presence....You're so wound up that you can't think of anything but the interview and you wouldn't want that friend to find out how nervous you really are....So you rush by....Besides, you're not in a particularly friendly or conversing mood and you really must run to make it for that interview....You're sure you must have left that person wondering whatever is wrong with you this morning....Well now you're on your way....You're continually glancing at your watch all along the route....As the time keeps ticking away you feel the tension mounting....It's an awful and frightening feeling....You're already beginning to regret the entire affair....You get to the building....It's a quarter to 10 now....You can feel your heart pulsating a mile a minute....Your stomach is acting up....Damn, you should've eaten....You're bound to get a terrible headache and

feel nauseous already....You're almost dragging your body as you enter the building....You're opening the doors now....You're walking through the lobby....and now waiting for the elevator....You look at your watch, afraid of what you're going to see....It's 10 to 10....You draw a deep breath trying to calm yourself but it doesn't help....You're riding up the elevator now dreading when you'll reach your floor.... Now you're walking down the hallway trying to locate the office you have to go to....You're extremely hesitant....That tension is beginning to climb up through your entire body....up your legs, arms, stomach, and face....And it's getting worse and worse....You're beginning to doubt your own sanity....How did you ever get into this mess, you wonder....But it's too late now....It's 5 to 10 and you're standing right in front of the office door....You slowly open the door feeling the tension in your hand as you grip the handle....And that perspiration on your palm has left a wet imprint....You attempt a smile as you see the secretary, but it's all a put-on....Your facial muscles are trembling and the twitching is uncontrollable.... You give your name but say no more....You're afraid your tone of voice will give you away....To your alarm she ushers you toward the interview room....Your heart skips a beat, you're almost in a state of shock....You had expected to be told to wait a few minutes before you were seen....It's always like that....And you had desperately needed that time to recoup your thoughts, to calm yourself before entry....But now without warning that safety valve allowing for that

brief but necessary respite has suddenly been shut off....You're almost at wits end as you stand immediately in front of the conference room....Your heart is racing....Your lips start to tremble....You press them together trying to contain the trembling....Now you're almost biting them hard enough to draw blood....Your hand is turning the door knob, any second now you'll be facing them....You're trying to hold your hand steady but a slight tremor remains....How you wish to god you weren't here....As you open the door you can see about 7 to 10 people sitting around a large circular table....They're all looking at you as you step through the doorway....Everyone is silent and serious looking....One of them signals to you to have a seat in a chair that has been strategically placed so that everyone can get a good clear look at you....You hurriedly take your seat and kind of look downward as you do so....You want to avoid meeting those penetrating stares....You feel the centre of attraction and your anxiety is working up to a greater and greater height....You're wondering what they must be thinking....You've just sat down and already you feel glued to your seat....Your heart is thumping; the sound getting louder and louder....It's so strong now that you can feel your chest expanding and contracting with its impact....You're wrinkling your hands....You feel hot all over....You want to loosen your collar but you're afraid to....You're self-conscious of every gesture you make, of every sensation in your body....You can feel those short spiking nervous impulses skittering about your body....Now you hear your

name called and you immediately jerk upward....You anticipate the worst to come now....The man introduces himself and asks you to state your qualifications and to briefly talk about yourself and as to why you're interested in this particular job....All the while as you hear him talk you have to make a deliberate effort to listen to him....

Your mind is only on yourself....thinking about all that anxiety locked inside you....whether they can tell how scared you are....and of how best to answer any question that may arise....As you attempt to answer the questions posed you find yourself being more self-conscious than ever....You listen to your quivering voice, your beating heart, and your strained gasps of air, both deep and short....And as you glance at your audience nothing registers but an undifferentiated glob of blurred imagery....Your mind is completely enslaved by that anxiety; you can hardly let yourself think about anything else....

You're completely unsure of yourself as you talk....You're not at all confident....You're thinking about your mistakes or at least how much better you could have expressed yourself....As you keep talking you feel worse and worse....The anxiety keeps building and you don't know how long more you can keep this up....How long more can you keep bottled up that hysteria that's ravaging your insides?....How long more?....And suddenly your mind goes blank....You don't know where you left off nor what you wanted to say....You get panicky....You tell yourself to calm down....You're screaming at yourself inside you to calm down but that anxiety keeps mounting....Your mind is full

of jumbled and confused thoughts....Your hands tremble and you quickly hide them under the table....You feel the sweat building on your brow....Your throat feels congested and so you cough but there's no relief....And now a headache has set in....Oh, that thumping....that merciless, painful thumping....And that sickening feeling in your stomach....That weakening, sickening feeling....And as you try to collect your thoughts you're wondering what they must be thinking of you now....You don't want to but you force yourself to look up at your audience....And you see them all looking directly back at you....They must already know you practically inside out....Now some are jotting things down on a pad they have in front of each of them....Now one person is whispering to another....You start to talk again almost apologetically....And as you talk you feel those pangs of tension increasing even more....Your face is flushed, you can feel the heat....You force a smile but it doesn't fool anyone....It's a superficial and vain attempt....And as you continue to talk you can feel your cheeks and lips trembling....And now you stutter....How humiliating....And now some more whispering, some more note-taking....You're sure now that your performance is poor, and that they've picked it up....You're sure you've already lost the job or at least are close to losing it....And that headache....it feels as if your head is about to split in two....Again, you're so self-conscious that you can hardly concentrate on what you're saying....And now you get stuck....You've just mixed up two thoughts and you have to correct

yourself....Boy does it look bad....It's a terrible presentation.... And it's a reflection on you....on you as a person....You find yourself mumbling now....correcting and re-correcting yourself....You're almost contradicting yourself....But you're so uptight....You're so worried about having everything so right that you're not satisfied with anything you say....You're questioning, doubting, and criticizing your own words as you talk....It's as if everything is going wrong....You don't even feel in control of what you're saying....It's as if the words were flowing out at their own will without first being checked with you....Oh, how much more of this torture can you endure....You're running out of what to say now....You look up at your audience as you talk and you can tell from their reactions that you're not getting your points across....Rather you're giving the impression of a frightened and immature little kid who obviously can't relate well....This is an ordeal you'll never forget....You shift in your seat over and over again trying to find a comfortable seating position but it doesn't help....Your back is aching, your neck is strained....Your entire body feels tied up in knots....And now someone interrupts and asks you a few questions....You shoot up to meet his challenge but even as you answer you feel that lack of confidence, that total lack of feeling of being able to overcome and do a swell job at it....You expect to louse up and it always comes true....It's as if it was a self-fulfilling prophecy....Well chalk up another miserable failure....And as you continued to talk you

again fall back into that old habit of hesitating, talking either too fast or too slow, mumbling and stutering on and off, and continually correcting and re-correcting yourself....You even say things or use words you had never intended to and are sorry later that they escaped....And you're so tense that you're jumping at your answer....You're not thinking about it as you should....But you can't do otherwise....You're so anxious that you just have to blurt things out, you can't think straight....You're impatient with thinking....So you wind up in a rut....You feel stupid and humiliated....All these important people witnessing you making a fool of yourself....You just can't hold it in....Any longer;....You feel you're going to burst....And that headache....more....and more....and even more pain....And now one of them rises and says that the interview has terminated and that they'll call you, don't call them....And with that they all walk out of the room without another word to you leaving you there to figure out for yourself the obvious implication of the statement....Your self-esteem has been dealt a severe blow....Although the interview is over the anxiety remains....In fact it's even worse now that you know that you've again messed it all up...that again you've made a fool of yourself....In fact the anxiety is only now rising to its most intense peak as you sit there thinking over all the mistakes you made and being entirely self-conscious of your feelings and your thoughts....It's a horrible way to go on living....And now the anxiety rises and rises....Go ahead let it all mount to a peak....Let it increase more....and more....and

even more....Go ahead let it rise to a maximum pitch, don't fight it

....³⁻⁷Let it peak....Feel it peak....Now just ~~hold~~ it there.

APPENDIX P

FLOODING TREATMENT GROUP

SESSION #3 - SCRIPT #3

I would like to again re-emphasize the basic instructions that you have been given with regard to our task in these sessions....As you are well aware we are trying to unlearn fear and anxiety in speech and this is the only focus or purpose of the program....Now, you must make a deliberate effort to visualize the presented scenes as vividly as possible....You must "live" the scene and you must allow yourself to experience the anxiety as it arises in connection with visualization of such scenes....And further you must force yourself to experience the anxiety full-blown, that is, at its most intense level....We ask that you follow these instructions to the best of your ability....the success of the treatment depends on itWe need your conscious and complete co-operation in the procedures of this treatment....The procedure requires effort on your partIn other words you will have to discipline yourself to co-operate and to follow the instructions....This may require a good deal of effort on your part as I've mentioned so do not surrender to the temptation of escape and avoidance....This is most important....otherwise our efforts will have been in vain....So please realize that we need your full co-operation and please do not compromise yourself when undesirable feelings arise.

To begin with imagine yourself standing at a podium facing an

audience....Picture yourself standing at that podium....The audience is comprised of both strangers....and friends....Some are looking kind of bored and disinterested....others are looking away....and still others are looking directly at you....As you glance out at the audience try to get the feelings that are associated with looking at your audience....Try to let the feeling of nausea, if that's it, come over you....Don't push it away....O.K. now picture yourself talking....Picture yourself getting into the first few minutes of your speech....You should notice that the anxiety now is somewhat greater than before....Try not to push this feeling away....Try to picture the audience as clearly as possible....Go ahead force yourself as much as you have to to look at your audience....We know how difficult this may be but force yourself to look at them....And don't make it just a short and furtive glance....Look at them and maintain that look....Now look at some of them as they stare at youLook at those penetrating, piercing eyes....Now look at some others as they feel bored with your talk....Now look at some who may even appear somewhat hostile....Go ahead search them out, search them all out....Look closely at that sea of faces....As they sit there giving off all those cues you're picking up try to get that frightened feeling in your stomach....that uneasy feeling as if something is going to happen and you don't want it to....And as you stand there talking a few minutes longer you can feel that tension building....You feel extremely self-conscious of how you're doing, of what you're doing....and most important of all (and you shudder

at the thought) of what they must be thinking....Don't stop those feelings....You're stopping them - don't stop them....Don't let them fall away....See yourself at that podium and not someone elseSee that audience clearly....See yourself looking at that audience....Don't turn away....Look at them....and feel the tension inside of you mounting....You try to stop it, but don't stop it.... Let it increase....Feel it increase....Now picture your mouth and lips moving and the words coming out....Hear the words....Hear yourself speaking....Hear the tone of your voice....You may not want to do it, but do it....Actually move your mouth and tongue and lips as if you were speaking to the audience right here and now....Feel the movement....Speak to yourself and hear those words....Now let yourself again look up at your audience as you speak....See their negative reactions....Experience those reactions that upset you....See them look bored and critical....Don't turn away....You pulled away....Don't pull away....Look back, look at those people again....Look at them.... Now try to experience yourself having difficulty expressing your ideas as well as you like....Experience yourself hesitating....Stopping and starting again and again....See yourself turning away and having to check with your notes now....If up to this point you haven't co-operated to imagine as instructed try at this point to picture yourself talking to the audience....Try to feel that tension in your body.... Try to feel your lips tremble and your voice quiver with nervousnessDo not push the feeling away....Get that frightened feeling....

Go ahead get that frightened feeling in your stomach....Now concentrate on it....Don't let it go....Now stop imagining....Let the imagery slip away....Now you should feel somewhat more comfortable....Now think back to the experience, simply reflect on it....During visualization you should have felt somewhat frightened and anxious....It is this feeling that we want you to experience....The more you permit yourself to experience this type of feeling the greater are your chances of being successful with this treatment....Now as we proceed with further scenes you should feel a highly anxious and perhaps even scared sensation.... That feeling should build up to a climax....getting greater and greaterAs you experience....as you allow yourself to experience these anxiety feelings you will notice that the feelings will go away....As you experience the anxiety at its peak you should find that it slowly but surely exhausts itself and dissipates....The anxiety will last for a while but as it reaches its peak, as you allow yourself to experience this peaking of your anxiety, it will go away....We will present a series of images now and along each step of the way we want you to experience feeling....Do not push such feeling away....Once you finish a particular step successfully you will notice that when we get back to it that particular set of imagery will no longer bother you....O.K..... now picture the audience facing you....Picture all those different people....That massive sea of faces....Go ahead force yourself to look at all those faces....and those eyes as they're being focused on youFeel them glaring at you....Feel them being critical of your speech

....Now feel your body tensed up....Feel your face flushing....Feel it turning brick-red....and now pale white....Go ahead experience the sensations of your face turning colors....Go ahead feel it turn colors....Feel it....Don't push the feeling away....Force yourself if you have to....Try to experience the feeling....Feel the heat building around your forehead....Now picture yourself in the midst of speaking while being self-conscious of these anxiety sensations....Experience the increasing tension....Feel the anxiety....Feel it increase....More....and more....Don't stop it....Make a deliberate effort to hold onto those feelings....Now feel the perspiration on the palm of your hands....Go ahead feel it....Feel that sweaty and wet sensation....Go ahead feel it....Don't push it away....Now feel that perspiration accumulate on the back of your neck....your armpits....and on your back....Get that uncomfortable feeling of sweaty skin rubbing against your clothes....Get that feeling of irritation and stickiness....Now smell that sweat....Go ahead smell that sweat as it accumulates on your body....Picture yourself speaking and experience all these sensations....Now feel your entire body heating up....Go ahead feel that sudden upsurge of heat from all around....Feel your body radiating all that heat....Go ahead get into that feeling....Now picture yourself standing up at that podium, speaking, and experience the sensations of perspiration and hotness....Go ahead put yourself in that scene....Don't push the feeling away....Don't do anything to reduce the feeling of discomfort and anxiety....Try to experience these sensations in their full inten-

sity....Now picture yourself talking and get that feeling of your mind suddenly going blank....Go ahead get into the feeling of being in the midst of talking and your mind going blank....Go ahead try it....We know it's difficult but try it....Force yourself as much as you have to to get into that feeling state....As you're standing there in front of your audience who are looking at you experience that feeling of panic....of alarm....of your anxiety bursting free from any control....Go ahead get into those feelings that accompany your mind going blank....Don't back away from it....Try it....Make a deliberate effort to do so....Experience that feeling of total loss of thought and concentration....Now experience the anxiety that accompanies this loss of thought as you're standing at that podium in front of all those people....Don't push it away....Don't tune out....Feel it....Experience it....Enhance it more and more....O.K., now just stay with that feeling for a while longer....Now let that imagery slip away....Let it slip away and experience that anxiety as it decreases....Feel it going away slowly but surely....Now we want you to keep up with us every step of the way....As each scene is being described experience any and all feelings that accompany your visualizing that given imagery....Do not push the feelings away....Force yourself to experience the feelings if you have to....Remember that the more effort you put into experiencing feelings of anxiety that arise as each scene is presented the greater the chance of success in this treatment....But it's all work that you have to do....You have the responsibility of making the effort to "live" each scene and of experiencing the feelings aroused....You must

get involved and that means that it must be you in the scene being described and not some substitute....You must experience yourself in the situations described....You may find that you have a certain technique to push the feelings away....You may find that you are playing with your fingers....moving them back and forth....or tightening certain muscles to diminish or fight the anxiety....We do not wish you to do this....If you are in any way failing to fully comply with the instructions please stop it as of this moment....Drop any technique you may have developed to avoid the full impact of the anxiety feelingsO.K. now let's try it again....You're at the podium making a speechGo ahead picture yourself at that podium....You're so uptight that you can feel that queasy nauseous feeling in your stomach....UCH-UGGIt's making you sick....Go ahead get into the feeling of your stomach being twisted in knots....Feel that tension in your stomachExperience that nauseous feeling....And now you have to go to the john, you just can't hold it any longer....Go ahead feel that pressure in your bladders....Feel it....Don't fight it....Feel it getting worse and worse....Feel those painful pangs in your stomach warning you to go....Now experience yourself having difficulty concentrating on your speech....Experience the difficulty you have concentrating as you worry about trying to hold it in....Feel a headache coming on if that's what happens to you....Get into the feeling state of holding it in longer and longer and experience any other sensations that typically accompany such feelings....Remember that whatever you do do not fight

the feeling....Now feel your lips tremble....Feel them tremble....Go ahead feel them tremble as you continue to talk....Feel them moving up and down in that nervous and seemingly uncontrollable fashion....Feel that strange sensation of rapid jerky movement....Now experience yourself having to hesitate before saying each word or sentence....Go ahead feel that need to hesitate....Experience yourself saying "ah" over and over again if that's what you do....Or experience yourself making those pauses that are typical when you're anxious....Experience any sensation that accompanies your having to hesitate as you speakLet it increase to its full intensity....Don't fight the feelingNow experience yourself having to consult your notes....Go ahead experience that urgency that necessitates your having to continually and excessively consult your notes....Experience yourself reading most of the time if that's what happens....Experience your having your head turned toward your notes....Go ahead feel that necessity to look at your notes continually and incessantly....Get into that feeling of dependency....of a lack of confidence....of being scared to speak without your notes....Go ahead get into the feeling....Now experience yourself doing without the notes....We know it's hard but try it.... Experience yourself making a deliberate effort to continue to speak without consulting your notes....Experience that upsurge of anxietyDon't fight the feeling....Experience the anxiety and picture yourself talking without referring to your notes....Go ahead keep it up....Put yourself right into the situation....Get a clear picture

....Now take a deep breath and try to make that scared feeling get even worse....Take a deep breath and make that feeling get worse.... as worse as you can....Go ahead take a deep breath....That's it.... Another deep breath....That's it....Now experience yourself fumbling with words....You may stutter or just use the wrong word on occasion or you may do both....Go ahead experience yourself speaking in front of the audience and fumbling with your words....Experience the anxiety feelings that accompany such mistakes....O.K. now feel your hands tremble....Go on feel them tremble....Listen to the pages of your notes flap against each other....Go ahead listen to that familiar flapping sound that gives away the trembling of your hands....Now imagine yourself having to find a particular page of your notes....Go ahead imagine yourself sifting through your notes trying to locate that one page....Now experience yourself fumbling around with the pages as your hands tremble and feel kind of awkward in their movement....Go ahead experience the difficulty of manipulating the pages with your hands as you continue to talk in front of all those people....Now imagine that as you sift through your notes a page falls to the floor....Go ahead picture yourself in that situation....Experience that sense of humiliation and increasing anxiety as you bend down to retrieve that fallen page....Don't push the feeling away....Enhance it....Augment it....Do anything you have to experience the full intensity of the anxiety.... Now as you bend down and then rise get into the feeling of worrying about what the audience must be thinking of you as you stand there

looking ridiculous and tense over what just happened....Go ahead experience that feeling of looking "gauche" in front of your audience, of having obviously given yourself away....of having let your audience know how anxious you really are....Go ahead get into that feeling of being found out, of being discovered....We know it's difficult but don't pull away from it....Experience it in all its manifestations and dimensions....Get into the physical features of the anxiety feelingsand now get into the thoughts that arise in your mind as you undergo the experience....Remember, don't compromise on the discomfort that you have....Let the disturbing feelings and thoughts increase to their maximum intensity....Now hold them there for a while longer.... O.K. now if you've been able to get into those upsetting feelings and thoughts, fine....Just keep it up and try if you can to get into them even more....You'll be surprised at what you can do....Now for those of you who may still be having difficulty in visualizing the scenes and/or experiencing the disturbing feelings and thoughts associated with each of the scenes we ask you once more to disinhibit yourselfDrop anything that you may be doing that is not allowing you to experience the anxiety....Motivate yourself....force yourself to do so otherwise the treatment cannot work....And remember that if the anxiety does not arise and increase spontaneously then it is up to you to make the anxiety appear and then augment it more and more until it reaches a breaking-point....If you have been doing this you will have noticed that initially your anxiety goes up and up but that as soon as

the peak or breaking-point is reached the anxiety starts to slowly slip away....At the termination of treatment you will or at least should be able to visualize the entire battery of presented scenes without experiencing anxiety....Such disappearance of anxiety should then generalize to real-life situations....O.K. now picture yourself standing at the podium, speaking to an audience....Make sure to get a clear image of yourself standing there....You're a few minutes into your speech and as you talk you can begin to feel your legs becoming wobbly....Go ahead feel your legs becoming wobbly....Feel the tremors travelling up and down your legs....Your leg muscles are extremely tensed up and you get a feeling of an insecure footing on the ground....It's a feeling of a lack of firmness in maintaining your upright position....It feels as if the structure supporting you, your legs or body, is somehow crumbling....weakening....slowly giving way....It's a scary and nervous feeling....Come on now experience yourself speaking to the audience and having these feelings....Come on don't fight it....Let the anxiety surge forward without restraint....Let it overwhelm you....If you're scared or frightened, good....Just let the feelings ply their course....Let them build to a crescendo....and once they do so you will find that they will exhaust themselves....If you are having difficulty experiencing these feelings make a deliberate effort to arouse them....O.K. now picture yourself standing in front of a class making a presentation....Your prof is watching you closely....You can tell as he's almost looking you right in the eye....Your entire grade rests

on your performance on this presentation....You can feel all that pressure building inside you at the thought of the importance of this speech....Go ahead place yourself in the situation just described.... Come on don't pull away....You're pulling away! - Do not pull awayWe know it's difficult but you must try....You must get into the feelings that arise in connection with visualizing this scene....This is the secret of this treatment....this is the key to success....Now as you're talking to the class you experience those disturbing thoughts capturing your mind....They're familiar thoughts....you've had them so many times before....They concern confidence, ability, failure, and about what the others must be thinking of you....Of whether their judgements are positive or negative....And if negative, then what could they be....and what could they lead to....Go ahead experience these thoughts plowing your mind....Don't avoid any of them....Build on them from your personal experiences to make the anxiety more intense....Get into all the physical manifestations of anxiety that accompany these disturbing thoughts....Go ahead get that feeling of worry....mixed with fear....Feel as if you're mangled with anxiety....Feel that anxiety tearing and shredding your insides.... Now make it all worse....Make it as worse as you possibly can....Get into all those feelings related to being watched....being evaluatedmaking mistakes....and being all the while self-conscious of your anxiety....And as you continue to picture yourself talking in front of the audience get that feeling of doing more poorly than anyone

else....Get that feeling that your presentation was the worst of the lot....Everyone else's was so much better than yours....Get that feeling of inferiority if that's what comes over you....Don't block any of the feelings....O.K. now hold onto the image until the anxiety peaks and then withers away....We'll give you time to work up to this point....O.K. now we want you to take some time and we want each of you to force yourself to relive in fantasy right here and now the absolutely worst experience you have ever had, or anticipate having, with regard to public-speaking....Go ahead relive that most anxious, most terrifying speech situation you have ever encountered or anticipate ever experiencing....Do not avoid or compromise on the feelings that are aroused as you imagine this situation or set of situationsForce yourself to live the experience in its most minute detailDon't leave anything out....Let the worst happen....Remember it's crucial for success in this treatment....O.K. now we want you to repeat the experience over and over again until the anxiety is no longer there....Experiencing the anxiety in its entirety.... in its most intense state....Remember that the greater amount of anxiety you allow yourself to experience the greater your chances of success in this treatment program.

APPENDIX Q

D-P TREATMENT GROUP

TASK A - SESSION #1

Anxious speech behavior is a process of poor communication which produces diminished returns in productivity of effort no matter what you do. You can always do better if you can communicate better. To be more effective in communication one firstly has to become fully aware of the important factors involved in effective communication. Once aware, one can then utilize these factors to guide behavior and thereby to maximize productivity potential and satisfaction of effort. These factors hold true no matter whether in reference to individuals or to large monolithic organizations. The task in this session is therefore to have the group become aware of these important factors of effective communication. To do this, the task requires that the group decide on and list the 5 factors of communication it feels are absolutely essential if maximal effectiveness and productivity are to be achieved. Also rank these 5 factors you have arrived at in order of importance.

TASK B - SESSION #2

In a recent authoritative poll of 500 of North America's leading politicians, academicians, business executives, union leaders, reform group representatives, and newsmen, a list of the top 15 problems

facing North America was compiled. After much consideration these problems were ranked in a generally agreed upon order of importance. The group's task this session is to attempt to reproduce the results obtained in the poll - that is, to list the top 15 problems and then to rate them in order of importance or priority. You are to employ the method of group consensus in reaching any decision as to what should be listed as a top problem and what ranking it should have. This means that your decision must be agreed upon by each group member before it becomes a part of the group decision. Consensus is difficult to reach. Therefore, not every decision will meet with everyone's complete approval. Try, as a group, to make each decision one with which all group members can at least moderately agree with. Here are some guides in reaching consensus:

1. Avoid arguing for your own individual judgments. Approach the task on the basis of logic.
2. Avoid changing your mind only in order to reach agreement and avoid conflict. Support only solutions with which you are able to agree somewhat.
3. Avoid "conflict-reducing" techniques such as majority vote, averaging, or trading, in reaching your decision.
4. View differences of opinion as helpful rather than as a hindrance in decision-making.

TASK C - SESSION #3

Since time immemorial man has dreamed of living in the ultimate of societies - what is called a "utopia". Many have written describing their conception of utopia and how to go about establishing and maintaining this utopian world. Unfortunately, all such writers have come up with differing views of what they consider to be utopia and how to establish it. Your task this session is to arrive at a group consensus as to what is a utopian world and what would be the steps involved in converting current society to this ultimate goal.

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- 1950- Born to Herman and Rose Weinberger in Vasarusnameyn, Hungary.
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